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COVER - EVENING GROSBEAKS

by Ludo Bogaert

Ludo is a staff artist at the Provincial Museum and Archives of Alberta in Edmonton. He is a former President of the Edmonton Bird Club, and has contributed covers to both the Alberta Naturalist and Edmonton Naturalist, as well as donating prints of Snowy Owl and Common Loon to FAN for sale. The following article was written to accompany his cover.

COVER STORY

EVENING GROSBEAKS ON ALBERTA CHRISTMAS BIRD COUNTS

by Martin K. McNicholl
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Introduction

A series of events led me to write this article. First and foremost, my interest in Evening Grosbeaks was heightened two winters ago when I was asked by David M. Ealey to instruct him on removing birds from mist nets. We spent a few mornings at the home of Dr. Fred C. Zwickel, near Sherwood Park netting birds. Most caught were Evening Grosbeaks, several of which were already banded! Investigation by telephone revealed that they were banded by J. Cam Finlay at his home in the same general area. Furthermore, birds with my bands started showing up at Cam's place. A short note on these movements will appear in a forthcoming Edmonton Naturalist. The second event, and the most immediate was Ludo's submission of the cover drawing for this issue, and my desire to have an accompanying article for each cover drawing when possible. Since the Evening Grosbeak is a bird associated with winter by most Albertans, the December issue appeared most appropriate for the cover, and since December is the month of Christmas Bird Counts,

the topic seemed obvious. Thirdly, Norbert Kondla visited me with several comments on his intention to compile a bibliography of Alberta ornithology, and I thought that a compilation of Christmas Bird Counts in Alberta might aid his research, and also serve to make it further known to our readers. Finally, I thought it might also serve to summaraize the occurrence of this species in one short part of the year for the proposed work on the Fringillids of Alberta by the Salts.

This article, then, has two basic purposes. First, it summarizes the occurrence of Evening Grosbeaks on Alberta Christmas Bird Counts. Secondly, it serves as a compilation of the Christams Bird Counts themselves. In this regard, the following is not quite complete because a few issues of relevant journals were not available for checking. Thus, I would appreciate copies or references to any Alberta counts not listed in the following references, so that a history of the Christmas Bird Count in Alberta may be summarized for the December 1977 issue of the Alberta Naturalist.

Occurrence of Evening Grosbeaks by location

Locations of Alberta Christmas Bird Counts are here listed by alphabetical order.

Banff - Counts from Banff National Park were conducted from 1959 to 1961 inclusive, as pbulished by E.D. Beacham (1960a,1961a,1962a), and in 1974 and 1975, as compiled by D. McIvor in 1974 (Anonymous 1975) and G. Holroyd in 1975 (Holroyd 1976a Lang 1976). A second count from the area was conducted in 1975 at Bow Summit, as also reported by Holroyd (1976b; 1976d) and in Lang (1976). Table 1 lists the number of Evening Grosbeaks from these counts. The number seen on the 1975 count is uncertain as the American Birds compilation listed 21, whereas the Calgary Field Naturalist and Alberta Naturalist compilations did not list the species.

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Table 1

Evening Grosbeak numbers listed on Banff area Christmas Bird Counts

Year	Number reported	Name of Count	Source (s)
1959	0	Banff National Park	Beacham 1960a
1960	0	Banff National Park	Beacham 1961a
1961	7	Banff National Park	Beacham 1962a
1974	250	Banff	McIvor in Anonymous 1975
1975	0 or 21	Banff-Canmore	Holroyd 1976a, 1976c Lang 1976
1975	0	Bow Summit	Holroyd 1976b(1976d) Lang 1976

Black Diamond-Turner Valley - Only one count has been published from here to my knowledge. No Evening Grosbeaks were recorded on this 1970 count (J. Johnson 1971).

Bluffton - 8 Evening Grosbeaks were recorded on a 1966 count (Schutz, 1967), the only year of record for this locality.

Bow Summit - see Banff, above.

Calgary - Calgary has a continuous record of coverage, from at least 1957, with numbers of Evening Grosbeaks as reported in Table 2.

Table 2

Year	Number reported	Source (s)
1957	0	Beacham 1958
1958	0	Beacham 1959
1959	0	Beacham 1960b
1960	4	Beacham 1961b
1961	15	Beacham 1962b
1962	8	Beacham 1963
1963	17	Beacham 1964
1964	period only	Beacham 1965
1965	7	Beacham 1966
1966	0	Anonymous 1967; Beacham 1967
1967	31	Beacham 1968a;1968b.
1968	20	Halliday 1969a;1969b.
1969	71	Halliday 1970a;1970b.
1970	20	Halliday 1971a;1971b.
1971	121	Anonymous 1972; Halliday 1972.
1972	99	Halliday 1973; Spalding 1973a
1973	107	Anonymous 1974; Halliday 1974a; 1974b.
1974	24	Anonymous 1975; Halliday 1975a; 1975b.
1975	501	Halliday 1976a;1976b; Lang 1976.

Camrose - Camrose is of particular interest in having the oldest Alberta counts, as follows: 1920 (Farley 1921), 1925 to 1927 inclusive (Farley and Twomey 1926; Farley et al. 1927; Farley et al 1928) 1929 (Twomey 1930). 1930(Twomey and Farley 1931), and 1935 (Farley 1936). No Evening Grosbeaks were recorded in any of these counts.

Cold Lake - Two counts have been reported from Cold Lake, one in 1963 (Roy and West 1964), the other in 1973 (W. Haras in Anonymous 1974). No Evening Grosbeaks were recoreded on either count.

College Heights - Three counts have been reported for this location, the first two with no Evening Grosbeaks in 1963 and 1968 (Kuhn 1964 and 1966) the third with 13 in 1966 (Kuhn 1967).

Edmonton - The longest continuously run counts have been from Calgary and Edmonton, as far as I have been able to ascertain. A count was held in Edmonton in 1955, and then every year from 1957 to the present time. Results for Evening Grosbeaks are listed in Tabe 3. Spalding (1973b) summarized the Edmonton counts of 1960 to 1969 inclusive. Similarly, Wolford (1975) summarized them from 1970 to 1974. These sources are not listed in the following table, as they are summarized from other sources listed. Wolford erred in listing 116 Evening Grosbeaks for 1972, as both original sources for that year agree in listing 131.

Table 3

Evening Grosbeaks listed on Edmonton Christmas Bird Counts

Year	Number Reported	Source (s)
1955	7	Hühn 1956
1957	0	Ball 1958
1958	31	H. Pegg 1959
1959	11	Steele 1960
1960	28	Demulder 1961
1961	40	Blades 1962
1962	18	Turner 1963
1963	72	Turner 1964
1964	39	Turner 1965
1965	9	Turner 1966
1966	11	Turner 1967
1967	67	Turner 1968
1968	19	Turner 1969
1969	98	Turner 1970a;1970b
1970	46	Turner 1971
1971	306	Turner 1972a;1972b
1972	131	Spalding 1973a;Turner 1973. Wolford (1975) erroniously listed 116 for 1972
1973	346	Anonymous 1974; Turner 1974a; 1974b
1974	301	Anonymous 1975; Turner 1975.
1975	702	Bembridge 1976; Lang 1976.

Grande Praire - The only count reported for this locality was from 1953, when no Evening Grosbeaks were seen (Helleiner et al. 1954).

Grande Valley - Two Evening Grosbeaks were seen here, on the only count conducted, in 1969 (Smith 1970).

Highwood River Road-Coleman-Kananaskis Road Jct. - J. Johnson's (1971) report of a count here in 1970 listed no Evening Grosbeaks.

Jasper - The only year of a count reported from Jasper was 1973, when 2 Evening Grosbeaks were seen (A.R. Smith in Anonymous 1974).

Lethbridge - A newcomer to the Christmas Bird Count scene, Lethbridge observers counted 35 Evening Grosbeaks in 1975 (Lang 1976).

Raven - Keith (1960) reported no Evening Grosbeaks on a 1959 count at Raven.

Red Deer - Two counts have recently been held in Red Deer. 103 Evening Grosbeaks were counted in 1973 (Anonymous 1974), and 213 in 1975 Lang 1976; O'Riordan 1976).

Saskatoon Lake - No Evening Grosbeaks were seen at this locality on their only count, in 1975 (Lang 1976).

Stettler - The first count reported from Stettler was in 1966, when one Evening Grosbeak was observed during the count period, but not on count day (Lohr and Lohr 1967). More recent counts have been 3 in 1972 (Lohr 1973; Spalding 1973a),5 in 1974 (Lohr in Anonymous 1975), and 18 in 1975 (Lang 1976).

Wetaskiwin - See page 264.

Wildlife Reserve of Western Canada (Water Valley) - No Evening Grosbeaks were seen here in either years of counts, 1974 and 1975 (Anonymous 1975; Butot 1975; S. Johnston 1975. 1976a, 1976b).

Trends - Since only two counts (Calgary and Edmonton) have spanned a relatively long period of years, trends are difficult to unravel. However, two features do suggest themselves from the data at hand. First, there appears to have been a general increase in this species in early winter in Alberta, at least in the larger centers. This, however, is not absolute, as fluctuations still occur (compare Calgary in 1974 to 1973 and 1975). Secondly, even in peak years,

mountain locations appear to attract few of these grosbeaks. Only time and more intensive field work can properly validate these apparent trends. The apparent increase, however, has been commented on by various obervers throughout the Prairie Provinces, and Houston (1976) has remarked that its apparent east-west migration pattern probably reflects the recency of its invasion of the prairies in winter.

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Wetaskiwin - (Should have been on page 258). Counts were held in Wetaskiwin from 1963 to 1966 inclusive. No Evening Grosbeaks were seen in 1965 (Pegg 1966), and only one each during the count period in both 1963 and 1966 (Pegg 1964; 1967). In 1964, three were counted (Pegg 1965).

FOODS OF RED FOX AT SOME SOUTHERN ALBERTA DEN-SITES

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Between summer 1974 and autumn 1975 I inspected several den-sites of Red Fox (Vulpes vulpes) in southern Alberta and recorded descriptions of each. The general locations of these dens were: 45 km north of Calgary: a breeding den recently abandoned (August 1975); 18 km east of Calgary: an active breeding den with 4 pups about half to two-thirds grown (20 May 1975); 15 km southeast of Sullivan Lake: a den recently occupied by 3 pups and at least one adult (10 July 1975); and 45 km northwest of Medicine Hat: a site long abandoned, probably used for breeding. All four sites were located in topographically similar situations. All were within about 0.5 km of a marsh or stream/marsh area; all were on slightly higher, sloping and quite open pasture or native mixed-grass prairie; each was within 3/4 km of an occupied farmyard.

In view of the fox's reputation as a killer of domestic fowl, this association with farms would appear significant. But an analysis of the middens about the openings of the dens showed that a rather small percentage of foods consisted of domestic birds. The middens of the Medicine Hat, Sullivan Lake and north Calgary locations were not extensive, and contained a total of three hens, some sawn bones of cow (Bos), skulls and other remnants of 17 Richardson Groundsquirrels (Spermophilus richardsoni); 9 Pocket Gophers (Thomomys talpoides); at least 12 Meadow Voles (Microtus pennsylvanicus); and 5 ducks, of which only one (Mallard, Anas platyrhynchos) was identifiable. At the east Calgary site, however, the midden was extensive, and a partial analysis of it yielded an impressive list of food species.

The site consisted of three dens,two about 2 m apart, and a third some 40 m distant. When I approached this area with C.R. Wershler in late afternoon of 20 may 1975, there were two fox pups at each of the two more widely separated dens, and an adult lying down near one pair of young. As we walked toward the dens the adult rose, slowly moved away toward the marsh, and began to hunt there. An adult female fox was found between the den-sites, dead about two

to three weeks; the resident farmer complained that a passing motorist had stopped and shot her from the road. She had been lactating when killed (about 1-5 May_.

The condition of the earth about the dens, hard-packed and full of bone and feather material, suggested that this site was of considerable age. The land owner stated that foxes had bred here, at least periodically, for eight or ten years. The food debris was in many cases part of a hard mud matrix, and I did not attempt to excavate this. The list of food species which follows is therefore not complete; numbers of each species were ascertained by counts of heads, wings and legs, and by the skulls of the mammals.

White-tailed Jackrabbit	Lepus townsendi	3
Snowshoe Hare	Lepus americanus	1
Richardson Groundsquirrel	Spermophilus richardsoni	17?
Thirteen-lined Groundsqurrel	S. tridecemlineatus	1
Pocket Gopher	Thomomys talpoides	11?
Meadow Vole	Microtus pennsylvanicus	5?
Muskrat	Ondatra zibethica	8?
Snow Goose	Chen hyperborea	1
Mallard	Anas platyrhynchos	8?
Gadwall	Anas strepera	1
Pintail	Anas acuta	7?
Green-winged teal	Anas carolinensis	1
Blue-winged teal	Anas discors	4?
Shoveler	Spatula clypeata	3
Gray Partridge	Perdix perdix	1
American Coot	Fulica americana	5?
Yellow Perch	Perca flavescens	1
Fish	unidentified	2?
Domestic fowl	Gallus gallus	3

The hares, of both species, were all in winter pelage when taken; the origin of the Snowshoe Hare is uncertain, since no woods of any extent existed within 3 km of the site. Undoubtedly the winter hunting territory of these foxes would be larger than their summer one however. The resident farmer noted that he had left a few chickens and domestic duck trimmings out for the foxes "from time to time" but that he had contributed no other foods. One leg of Mallard bore a band (No. 837-67264); the bird had been banded when about one year old near Wapato, Washington on 2 May 1972, by personnel of the Washington Department of Game.

Some indication of food preference may be deduced from the proportion of each species left uneaten by the foxes. In all cases the waterfowl were consumed except for the legs, wings, heads, and the thoracic cages. About half of the skulls were broken open in the occipital region. The fish were virtually uneaten but were torn in pieces, apparently after they had become well dried. The Muskrats and Pocket Gophers were about 75 to 85% eaten, and the Richardson Groundsquirrels about 65%; few of the skulls had been broken into however, and the uneaten, dessicated portions of the mammals generally consisted of the foreparts with forelegs still attached. The evidence suggested that, once fed upon, these species were of no interest as food later. Although five skulls only of the Meadow Vole were found, much vole hair was packed into the earth at the den, and it appeared that the capture of voles was more frequent than was indicated by the skull count.

Several items at the site bore recent tooth marks, and two pieces of wood, about 3 to 4 cm diameter and 20 to 30 cm in length, had been extensively chewed. A dried fish, some bones of the goose Chen hyperborea, and the sticks obviously served the pups as teething objects. One pair of pups was observed to use a stick as a toy, fighting over possession and engaging in a tug-of-war. The amount of feather debris at this site was not great, in view of the many skeletal remains of fowl, and feathers may have been used as a nesting material in the burrow, for they were noted in some quantity at the bottom of the first perpendicular stage of the main den-opening. Evidently very little of the foxes' prey is wasted when succeeding generations use the same breeding site.

OVERHEARD (55)

Ghostly reality

"Each time we see a cougar that has "treed" in front of our hounds we are left with the same reaction of amazement that such magnificent animals actually exists. By tracking these animals we have come to respect their ability to roam long distances, raise their families, and kill their prey without being observed."

Penelope Dewar
Nature Canada 5(4);46, 1976.

REPORT ON THE GREAT DIVIDE TRAIL SITUATION

FOR THE NATIONAL AND PROVINCIAL PARKS ASSOCIATION OF CANADA

by Aileen Harmon
Box 656
Banff, Alberta.
T0L 0C0

Editor's Note: The following report is a slightly edited version of Miss Harmon's report to NPPAC. This article was invited by the Editor, along with an invitation to the Great Divide Trails Association for an article outlining their plans and objectives. The latter appeared in Alberta Naturalist 6: 186-188, 1976. Further comments from our readers are welcome.

M.K.M.

Since the original proposal for a Great Divide Trail, little activity has taken place. Survey and research was instigated in the main block of the mountain Nation Parks, and there has been some construction. In 1974, with an Opportunities for Youth grant, six young people undertook a survey of the route possibilities between Waterton Lakes and Banff National Parks, and last year 1975 the Great Divide Trail Association was formed.

In 1976 the Great Divide Trail Association provided a guiding document which is well conceived and researched. It proposes a long distance hiking and equestrian trail between Banff and Waterton Lakes National Parks, as the backbone to a network of trails lying chiefly within the forest reserves and provincial parks of Alberta and British Columbia. They propose zoning to restrain motorized traffic from use of these trails. The Association consists of some 100 individuals with some 13 organizations providing moral support. Their purpose is to initiate trail construction and carry out trail maintenance outside the National Parks.

The concept document is very complete, with a trail user's code and construction standards outline. Much of the trail is already in existence in one form or another (old roads, pack trails) with 62 miles of new trail requiring construction on the preferred route

which has approximately equal mileage in both provinces, totalling 245 miles. It acknowledges land use conflicts with coal seismic exploration, logging and all-terrain vehicles. It states that most of the private study and public support is for this route and hopes to obtain a visual corridor throughout its route where no new conflicting uses would be allowed.

An alternate route also is described which would be confined to Alberta, 183 miles in length, terminating in the north at the Ribbon Creek Youth Hostel in the Kananaskis Valley.

They propose a chain of small campgrounds (4-5 tents) for the main trail or in adjacent areas accessable by side trails. Access trails would vary from 1 to 5 miles in length, and would be not less than 10 miles apart.

They hope for government participation and cooperation involving route approval and consent for construction from agencies involved (Forestry and Parks Branches chiefly). They desire written and verbal policy statements from both provincial governments in support of the association's concept, and legislation to establish the corridor to conserve areas of historic and/or natural significance, as well as the banning of motorized vehicles from the main trail and its branches, and thwarting of such vehicles from unauthorized access. They would also welcome expertise assistance from the provinces in aiding construction also would be hopefully anticipated from the provinces.

1976 activities

The province of Alberta is developing a trails program at three levels; local, regional and provincial; involving citizens organizations with local knowledge. The Calgary Regional Trails Council seems to be spearheading this trend, although there has been activity in other areas also for several years. This council has some 10 organizational members and is hopeful of expanding membership to include NPPAC and others. Most active in the council are the Great Divide Trail Association which this summer did location work on a 25 mile section of the Great Divide Trail from Cataract Creek to Fording River Pass. A grant from Recreation Parks and Wildlife (Alberta) is imminent to fund this pilot project.

It is proposed to confine it to foot traffic with an alternate horse trail in the same area and facilities at access points. Shell Canada assisted in this section by clearing an historic trail over Fording River Pass which had been blocked by their seismic activity.

Most trail planning on the east slope is delayed until zoning is complete, but trail organizations feel pushed to identify trails and wilderness before zoning is finalized, when it may be to late. The Chinook Trail Association has planned a loop trail east of the Kananaskis and west of Moose Mountain, while the Canadian Youth Hostel Association has plans for an extensive trail system out of their hostel near Moose Mountain. There is considerable activity in the Edmonton area where the Waskahegan Trail has been planned and negotiated with property owners by a private organization, and is now in use throughout the year.

Recreation, Parks and Wildlife is backing their trail development with trail planning and design workshops. The first workshop was recently held at Hinton to assist in layout of a cross-country ski trail in Switzer Provincial Park. The department is also documenting existing trails and river routes, and this will be followed by a program of publishing guides, and trail management.

Thus the general feeling seems to be one for diversification, and I very much agree with this view.

At a meeting held about a year ago by the Great Divide Trail Association, a British Columbia government representative indicated that their Parks Branch was reluctant to have the trail traverse Assiniboine Park, where they are trying very hard to limit use but feel at the mercy of Parks Canada in trail location. In any case, both from the viewpoint of public demand from B.C. people and other priorities, The Great Divide Trail is not seriously considered by B.C., not to speak of lumbering activity. However, this summer the Great Divide Trail Association sent a copy of their guiding document to the B.C. Government and this was referred to the B.C. Recreation Council, an amalgamation of all outdoor organizations in British Columbia. This seems to have been circulated, since a proposal has been received from northern B.C. for extension north of Jasper.

The present situation in the National Parks Recently: tight money has made it necessary to concentrate primarily on maintenance of heavily used trails. However, planning has continued, as well as some construction. The slow pace of this project, although frustrating to some, is definitely a plus in my view, allowing use patterns to be established and studied. About two years ago a tentative agreement was reached with B.C. forestry concerning the Blaeberry areas, and presumably to coordinate ideas and formalize agreements.

Some work has been done in Yoho Park this year to improve the Goodsir section of the trail. In Kootenay Park there is an alternate trail, still requiring some work, from Readearth Pass near Egypt Lake to Verdant Creek and over Honeymoon Pass to Vermilion Crossing. Investigation is also under way for alternate routes north and south of this section. No work has been done in Jasper or Waterton as far as I can determine. Alternate trails are perhaps a desperate diversion tactic, since one might predict that only adverse weather would lure hikers from the high route which, falsely for the most part, is advertised as on the Great Divide. Valley diversions are hardly what the user will expect.

CRITIQUE

I have serious objections to the Great Divide Trail Association's proposal that the trail combine hiker and equestrian use. This has long been a problem in National Parks in much of the alpine and sub-alpine zones and now it is becoming necessary to provide alternate trails or to exclude horse traffic from some areas. In Assiniboine Park long term horse use has presented grave problems and I believe horses are now being phased out there. The Alberta people seem to realize this also, since in the area surveyed this summer, an alternate trail riders' route is being considered.

I have read a number of research papers which generally agree on several points. Early season travel under moist conditions is most destructive in alpine zones. Travel at that time further aggravates deterioration when water collects in established trails and adjacent vegetation is trampled by travellers seeking drier routes. In closed forest conditions this is less of a problem since vegetation confines travel to some extent. Restriction or elimination of horse use would permit heavier foot traffic since deterioration of

vegetation and consequent erosion is much more rapid with horse use In higher country hikers will often abandon a trail for a drier or more interesting (view) route and even light use can affect deterioration of vegetation. Alpine communities in rocky areas are most resistant to trampling since rocks protect the plants, but once rocks are loosened, vegetation is vulnerable and very slow to recover, due to climatic constraints. Dominant species are generally the first to succumb to trampling, so that a change in the plant community occurs.

Looking at the sociological considerations, hiker education is most necessary if any controls are to effective. It would not be possible to maintain habitat quality unless public education is developed for good manners on trails and in campsites. Good trail design and maintenance would not be enough. People must be ready to accept an alternate route if necessary for reasons of rehabilitation or over-crowding. Certain areas in the Parks which are already popula are receiving such heavy use that the wilderness experience is rapidly vanishing from the Great Divide Trail; hikers are seeking alternatives where camping is not wise or permitted, resulting in proliferation of fire circles and garbage. In theory, strict administration of wilderness permits could control this, but with many points of access and several administrative jurisdictions involved, this seems unlikely. It will be interesting to see how Banff Park's unit plan for the Spray Divide (due next spring), will deal with these problems.

One of the chief problems of the Great Divide Trail is over-promotion before siting and use patterns as well as problems could be determined, so that the trail already in existence is over-used. Although well-intentioned, the National and Provincial Parks Association brochure of 1970 may have contributed to this. The National Geographic article did not help the situation.

I have very little information on other long distance trails and their use. Some observations have been noted on the Appalachian Trail which has parallel multiple jurisdiction but is administered as far as shelters and probably some maintenance is concerned, by a long established Appalachian Trail Club, which supplies caretakers and user education. Alternate network trails and campsites are suggested to relieve pressures there, and this seems to be the trend in our situation. The Sierra Club is producing a Wilderness Impact Study

Report but enquiries have not been answered. I would be very interested in any recent studies on use of the Pacific Crest Trail.

POLICY

It is perhaps too late for NPPAC to change policy on the Great Divide Trail since some wrok has been done, and Parks Canada is committed to it. Those sections already in existence are heavily used due to wide publicity. However the delayed action, for whatever reasons, has enabled to agencies involved to examine the very complex situation which exists with regard to coordinating location and working out administrative techniques. Much of the Great Divide Trail Association proposal is well conceived, and provided they can overcome land use conflicts and obtain cooperation of the provinces, it can be highly commended. However the trail, as dealt with in the proposal, is conceived out of context. It would of course be part of a system which extends through Waterton into Glacier Park, Montana, and northward through Banff, Kootenay, Yoho and Jasper Parks. Although Parks Canada presently opposes a Great Divide Trail north of Jasper townsite, there is the possibility of further routing north of Jasper Park which would automatically extend the route over existing trails in Jasper and Mount Robson B.C. Provincial Park. Such an extensive system creates its own problems of control and wilderness use, and increases pressure on sections already overused by focussing public attention on the Great Divide Route, although some will argue that the trail will distribute users over a longer distance. The fact remains that use patterns really connot be controlled or predicted. The small campgrounds proposed might be effective for some time but proliferation would undoubtedly occur into unsuitable areas for camping when existing campgrounds were full. The proposal is a worthy concept to provide a corridor for protection of wilderness recreation country, but it could very well destroy the wilderness experience by overcrowding. Diversification provides the only hope for relief in this situation. Both the Alberta people and Parks Canada see the Great Divide Trail as a low priority item in a network trail system, properly developed, and supported by trail guides, so that the maximum options are provided for wilderness travel.

SHORT-EARED OWLS IN THE EDMONTON AREA - 1974

by Ken Trann
R.R.2
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In the September, 1974 issue of the Blue Jay, I wrote, "It is too early to determine whether there is a 2 year cycle in these areas but 1974 should add further information." I returned to the original study areas, Beaumont and Namao as well as two new areas, Holden and Daysland, and found the short-ears were back in large numbers. These owls were numerous in other parts of the country as well: Fort Saskatchewan, Wetaskiwin, and Camrose, but shortage of time did not allow extensive research in these areas. Nest data are in the accompanying tables.

The return of the Short-eared owl (Asia Flamme s) allowed a continuation of observations, and there were a number of things I noticed that I was not aware of in other years. For instance, I had thought the "clapping" behaviour, part of courtship and territorial displaying, was performed only by the male. He normally circles high above the female, who softly drifts over the fields. The clapping occurs as he plummets earthward. His wings are brought together beneath him, in staccato rhythm, thus the clapping sound. However, on three occasions I observed females clapping as well.

Editors Note: I have observed both birds do this together in the Winnipeg, Manitoba area. M.K.M.

I had also mentioned in my earlier report I was not aware of territorial disputes. Because the owls often nest close together I assumed these disputes were minimal. But, a number of times in 1974, I observed behavior possibly relevant to this problem. The time was dusk. Three owls were involved, one apparently a spectator. This "spectator" bird perched on a fencepost, while the two other "participants" were occupied with a peculiar mid-air twisting and turning behaviour. One bird would pursue the other and there would be an about-turn; they would clash, then the first bird would retreat, while the second bird pursued him. This continued for

fifteen minutes or more. (When I say "clash", I do not mean feathers were flying, or anything that drastic. "Encounter" would be a more suitable word.) I have not seen this behaviour described before, so interested obeervers should watch for it. It is quite possible this disputing was not over territory, but rather, over a female.

Once, while walking a field, I flushed a Short-ear from a dirt depression. It appeared to be a nest-depression, but I was not convinced; there was no grass, just dirt. The owl did not seem the least apprehensive. The depression had obviously been dug out recently; it was a few inches deep, and the dirt was damp. This suggested nest-building behaviour, except there is little evidence substantiating the opinion that short-eared owls build a nest. I was also wondering about desertion. I discovered the nest before it was completed; would the bird return? So I waited a few days. When I returned there was one egg. The depression was lined with grass and straw (stubble field),not meticulously by any means, but serving the purpose.

(These birds do not seem directly bothered by human interference, although some trouble could be caused by a person leaving scented trails and trampled protective vegetation which would leave the nest susceptible to predators.)

It is sensible these owls would not build elaborate nests. The locations chosen are usuallv open, in stubble or short grass; a nest too large would be conspicuous. Marsh Hawks, (Circus cyaeneus) for example, also ground-nesters, build larger nests, but at the same time are more dependent on long grass or bushes for protection. Short-ears cannot be as selective as some species; they nest where the mice are abundant and at times depend exclusively on colouration for protection.

In 1974, 23 nests were located, containing 4 to 11 eggs. (See Table 7) The average clutch size was 7.5. (See Table 3). Twelve nests were successful; the failures were the result of farming operations or unknown causes.

Five eggs is often cited the common clutch size for the Short-eared Owl. My experience has caused me to question this. Nests found early in the season (May 1 - 30) revealed large clutches of 8 or 9 eggs, on occasion, 10 or 11. As the season progressed (June - July) the clutches averaged 4 - 6 eggs per nest. I am wondering if clutch size depends on nest success. Short-ears commonly nest in stubble, and suffer as a result. Nests are often plowed under by spring farming operations. It is possible the nests found with eggs in June and July -- those containing 3 eggs -- are re-nests. Perhaps they belonged to birds whose first attempts were destroyed; they re-nested and a smaller clutch was the result. (I am not suggesting all nests found with 4 eggs are re-nests. The abundance of prey is admittedly a factor determining clutch size, but the Short-eared Owl is seldom seen unless there is an abundance of prey.)

If the nesting behaviour of this owl is considered it seems reasonable a large clutch would guarantee survival of a maximum number of young owls. Young short-ears leave the nest when 2 - 3 weeks old. They are incapable of flight, crawling into the surrounding grass (or whatever), making it difficult to determine how many actually survive. There are no figures available; banding has failed to produce results to date. Because the young do not remain at the nest site it is impossible to know, with certainty, what becomes of them. A large clutch would obviously enhance the possibilities of rearing a large number of young birds.

To obtain accurate information regarding re-nests, colour-marking the adults would be necessary. Otherwise it is impossible to identify the individuals. If another nest is found there is no assurance it belongs to the original pair. One exception involves a pair whose territory is remote from other pairs. This is not common. Usually, 4-8 pairs can be located in a 2 - 3 sq. mi. area. Therefore territorial boundaries and individual owl movements are difficult to define.

My research also indicates 30 days as the incubation period for this owl. For example, one nest found contained 7 eggs on May 6. The clutch was complete (9) by May 10, which is an egg every two days. The first egg likely appeared on April 21. The number of days elapsed from the probable date of the first egg to the date of the first hatched egg was thirty.

A second nest contained 4 eggs on May 13. By May 20, the clutch was complete (8), an egg appearing, again, every second day. The first egg likely appeared on May 4. The first young hatched on June 3, an elapsed time of 30 days. Further statistics can be found in Table 2. The early departure of the nestlings must be remembered at this point. The young-fledged percentages recorded on the Table (4-6) are misleading if interpreted incorrectly. A high percentage fledged figure does not necessarily mean a high survival rate. It is impossible to know how many survive to maturity unless an observer follows each bird through the fields, which, of course, is impossible. Color marking is an alternative but probably not reliable enough. So the figures on the tables simply mean: once hatched, young Short-eared Owls have a good chance of leaving the nest.

Young Short-ears are normally quite passive, clicking bills, hissing but usually harmless. But, as in everything, there are exceptions. One young bird I encountered would scratch, claw, scream; it was unlike anything I had ever seen a Short-eared Owl do. This nestling was as difficult to handle as an adult Great Horned Owl. (Bubo virginiaus)

This same bird was interesting for another reason, being the inhabitant of an unusual nest; the young birds did not leave this nest in the normal manner (one at a time every two days or so). They left all at once, 30 days after the first egg hatched. A possible, though admittedly far-fetched, explanation is this: the young were carried by the adults to a safer location. The nest had been discovered by a fellow who was cultivating. He left a small patch of stubble, approximately 3 feet square, plowing the rest. The young had no place to go. They would be completely exposed if they ventured beyond the patch of stubble. So they remained in the nest.

Now, this becomes more interesting. One evening I drove out and checked the nest. It was 6:30 p.m. when I arrived. There were 7 young in the nest. The next day, at 2:30 p.m. there were 2 left. Later that evening I checked again--the nest was empty! I was a little suspicious, to say the least. Was it possible a predator had been making regular visits? I decided to have a look around. Using the nest as a center, I walked in gradually increasing circles until I reached a road which ran through the field. There was a

gas-well about a quarter of a mile into the field and the road was used as an approach. It was along the side of this road I found the young owls, each one neatly tucked beside a tummock of grass, and spaced a few yards apart. They were at least 100 yards from the nest. Did the adults carry the young to a safer location? The only other solution is they walked that far, which seems unlikely considering the time involved. In a little over 24 hours the young were out of the nest when normally such a procedure lasts up to two weeks!

Editor's Note: Carrying by the adults may be less far-fetched than it first sounds. Several woodpeckers are known to carry eggs! M.K.M.

The behaviour of the adults around the nest is interesting. They seemed to be less protective during the early stages of incubation. This, of course, varied with different pairs, but often the male was completely absent from the area (or appeared to be), and the female simply flew away when flushed. But once the clutch was completed, or young appeared, most pairs were more protective. One pair was extremely demonstrative. The male would greet me as I approached the nest from the road, which was 50 yards from the nest. He would be quite high and as I came nearer, he dropped lower. When I was approximately 50 feet from the nest he would start diving for the ground, squealing, doing this several times, frantically attempting to distract my attention away from the brooding female. When the female flew off the nest the male would swoop, literally screaming while the female floated above. Occasionally nests were found by watching an owl attack a Marsh Hawk, a favorite target. For example, once after walking a field, finding nothing, I started back to the road where my car was parked. I saw a Marsh Hawk cross the road, and suddenly a Short-eared Owl appeared and pursued the hawk. I started back into the field. The owl quickly headed in my direction. I had walked about 50 feet when the owl made the familiar distraction dive, screaming all the way. It was obvious a nest was hidden nearby. After a brief search I found it only a few yards away from the path of my first search. Similar incidents involving Marsh Hawks occurred on other occasions.

It seems apparent if the male is roosting, which is normally near the nest, he will not appraoach an intruder as readily as when he is active. Therefore it is much easier to find a nest in the early morning or the late evening, when the males are not roosting.

In conclusion, I must say I was impressed with this little owl's courage and endurance, faced as it is with predators, farming operations, and myself, the curious birder. The Short-eared Owl is one of the most beneficial mousers in existence as well as one of the most beautiful.

I would like to thank the Canadian Wildlife Service, particularly Richard Fyfe, for granting me a permit to band the nestlings; the many farmers who saved nests; and again, Brian Nicolai, for assistance.

OVERHEARD (56)

Furry Gourmet

"The habits of the muscles (sic) that inhabit our fresh water rivers are better known to the Raccoon than to most conchologists, and their flavour is as highly relished by this animal as is the best bowl of clam soup by the epicure of that condinent."

J.J. Audubon and J. Bachman
The viviparous quadrupeds of
North America,
1849-1854.

TABLE 1

Nest Summary by area - 1974

Namao	11e - 11y	11e - 11y
Camrose	4e - 0	4e - 0
Holden	9e - 0	6e - 0
Beaumont	52e - 35y	46e - 35y
Daysland	75e - 41y	75e - 41y
TOTAL	151e 87y	142e 87y

e = eggs
y = young

TABLE 2

Incubation Data - 1974

Nest	Probable date of first egg	Contents when found	Date found	Date of complete clutch	Date of first hatch	Total
#1	April 21	7	May 7	May 10 (9)	May 21	30
#2	May 4	4	May 13	May 20 (8)	June 3	30
#3	May 2	5	May 15	May 20 (9)	June 1	30
#8	May 14	2	May 21	May 30 (8)	June 14	30
#9	May 14	2	May 21	May 28 (7)	June 14	30
#12	May 24	1	May 26	June 2 (5)	June 21	30
#15	May 18	4	May 26	June 6 (10)	June 16	30

TABLE 3

Clutch-size (Complete clutches only) - 1974

Total Nests	Total Eggs	Average per nest
19	142	7.5

TABLE 4

Young Fledged (Complete clutches only) - 1974

Eggs	Hatched	Fledged	Percentage Fledged
142	87	87	61.3

TABLE 5

Individual Short-eared Owl Nest Data - 1974

Nest	Eggs and Young	Fledged Young
1	9	8
2	8	7
3	8	0
4	9	8
5	3	0
6	6	0
7	9	9
8	7	7
9	8	6
10	7	0
11	7	0
12	5	3
13	2	0
14	3	0
15	10	10
16	11	11

Table 5

Individual Short-eared Owl Nest Data - 1974 - Continued

Nest	Eggs and Young	Fledged Young
17	9	6
18	7	7
19	4	4
20	7	0
21	1	0
22	4	0
23	7	0
	151	87

TABLE 6

Combined Data - 1970 - 1974

TOTAL NESTS	COMPLETE CLUTCHES	TOTAL EGGS	AVERAGE PER NEST
55	44	316	7.2

YOUNG FLEDGED	UNSUCCESSFUL NESTS	PERCENTAGE FLEDGED
219	19	69%

MAXIMUM CLUTCH	BANDED
11	199

TABLE 7

Clutch-size (Complete Clutches only) - 1970 - 1974

Clutch	1970	1972	1974	Total	
4	0	4	2	6	
5	6	2	1	9	
6	2	1	1	4	
7	2	0	6	8	
8	0	2	3	5	
9	1	3	4	8	
10	0	2	1	3	
11	0	0	1	1	
	11	14	19	44	TOTAL

TABLE 8 - 1970 - 1974

Year	Total Nests	Complete	Incomplete	Total Failures
1970	16	11	5-4 failed 1 (3 young)	8
1972	16	14	2-4 young (2 per nest)	0
1974	23	19	4- all failed (3e,2e,3e,1e)	11
TOTAL	55	44	11	19

Writing-on-Stone Park and Area

by Marie Barton
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My introduction to writing-on-Stone Park and its environs in the company of one hundred Albertan naturalists (FAN) in May 1975 proved a heady weekend experience. I became caught in the fever of coulee-crawling and hoodoo-hopping quickly.

The pictoglyphs on the vertical, sandstone-layered and inter-bedded noduled cliffs that rise from the floor of the Milk River Valley and its perpendicularly-running, sheltered coulees made my day. One of the more recent Writing-on-Stone records tell of an Indian battle; horses, warriors and white man's guns much in evidence. Other pictographs, perhaps older, tell of hunting and feasting. The Indians, who crossed the short grass prairies, found oases in these steep-walled bottomlands. Some sought the stone writings for spiritual guidance. The Blackfeet believed them to be scribed by spirits.

As well, the Mounties, who manned the N.W.M.P. Detachment here from 1887-1918 to control the Indian war parties from across the Canada-U.S. border and also the liquor traffic, left their names on a free-standing rock at the entrance of Police Coulee. It's known as the Signature Rock. One also finds modern scratchings added by tourists. Signs are posted to warn against defacing the Indian writing-on-stone.
Concerned as we are to preserve these stone carvings of the past, they are not timeless. The stro-g Westerlies-winds of change-that gather force as they sweep down the east-west Milk River Valley (50 miles wind velocity with a high of 106 has been recorded), and pick up the talus sand from the base of the cliffs and hoodoos will inevitably do their work of scouring and erasing.

Disregarding the pictographs, the region's natural sculpture takes one even farther back in time. A good view of the millions-of-years' formation can be seen from Viewpoint Hill a natural mound. To the south across the meandering Milk River flood plains looms the Sweetgrass Hills, an igneous intrusion that rises 150 feet above the gently-rolling, brown-soil uplands with its scattered farm houses

homes of grain and cattle farmers.

The upland till (average 2,975 feet above sea level the highest point 3,230) is a glacial deposit from the last ice age known as the Wisconsin glaciation. It's depth measures from 10 to 15 feet. Immediately underneath lie the sandstones of the upper Cretaceous time dating back 60,000,000 years. Older rocks underly these sandstones down to the basement of the Precambrian floor 5,000 feet below the surface.

Even before the first of the four ice ages (we know that the last or Wisconsin, ice sheet covered the Writing-on-stone area) which took place over a spread of a million years, the most pronounced topographic features of the plains of today were already determined. Neither glacial erosion nor glacial deposits have changed the main land forms to any great extent.

Accordingly, the glacial floods coursed down the already-existing valleys and coulees made by ancient fracturing, faulting, uplifting and erosion of the earth's surface (Eocene period). Today the muddy Milk River meanders along its broad valley on its way to the Missouri across the border. The streams between the vertical cliffs of the narrow coulees join the Milk.

The pock-marked, honey-combed cliffs of the Milk River and the Police Coulee (our group visited only one coulee) harbored an amazing catalogue of bird, plant, and animal life. Through field glasses we spotted a Golden-mantled Marmot looking at us from a rocky labyrinth. (on the rim of a 50 to 100 foot slope) his hideout hollowed out by water seepage from over the top.

On a resistant, iron-rich, argillaceous sandstone cap, we spied a Canada Goose sitting on her nest. Tiers of gourd nests of the Cliff Swallow hung sheltered under rocky overhangs. Inside caves on the faces of cliffs, tell-tale droppings revealed the presences of nesting sites of such birds of prey as the Great Horned Owl and the Prairie Falcon. Rock Doves flew about.

A dead cow, rib case showing, lay where she had fallen, down a steep drop. Above, a shelf of meadow composed of light brown soil with grass and shrub, evidently a slumpage of the upland, explained that she had slipped while grazing. Cattle tracks fanned down the possible slopes to the water. Pronghorn Antelopes, so plentiful on the uplands where water holes are few, also use these pathways. Police Coulee smelled pungently of the ubiquitous sagebrush-fodder for pronghorns.

In the mud by the water we picked up tracks of deer, Raccoons and Bobcat. In a sun-drenched spot, a Bull Snake drowsed beside his crevice of stone, that is until he slipped inside because of our nosy presence. A Prairie Rattler chose to make his escape and we didn't challenge him.

On the talus, on rocks, and on the slumpages, grew wild parsley, shooting stars, yellow bells and moss phlox. The golden bean, already golden in the sheltered Police Coulee on this day in May-the long week-end remained in tight green bud in the windy Milk River Valley. Later in the season, the cacti-ball and prickly pear and fragile prickly pear will bloom in silken abundance. Hares hid in the thorny-buffalo and rose-bush tangle on the shady side of cliffs and on the river terrace next to the water. The older, drier terrace of the flood plain took on the nature of the semi-arid uplands. Low, scraggly skunk bushes that showed yellow ball of bud in and around the hoodoos needed no shade or shelter.

Washed by the stream in Police Coulee a thick layer of bedded shale underlay the sandstone cliff. No doubt the change of composition was caused by the ever-subsiding, ever-transgressing ancient, inland sea that once filled the interior of the continent. Here and there in the coulee grew 90-foot lone Western Poplars with catkins dangling.

I asked questions. I received some answers. Finally I went home to study and to read and to ponder on the geologic-time creations in its present setting as opened up to me on a careless weekend excursion. Nature holds so much more than meets the eye to the casual observer. I take a field trip and am startled into awareness by this fantasy land of cliffs and hoodoos on the prairies.

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OVERHEARD (57)

Nature vs. Capitalists

"The great illusion of the suburban experience was that Man can experience nature by owning pieces of it. And that is fundamentally incorrect. Nature eludes ownership."

Edmund N. Bacon
National Geographic
150 (1): 74, 1976.

OVERHEARD (58)

Modern Farming

"The need to control the population of various species is for the most part man-made, since in producing giant mono-cultures men encourage the growth in population of a single species by the exclusion of others."

Alberta Environment Conservation Authority
The Use of pesticides and herbicides in Alberta, p. 28.

SOME NOTES ON FEEDING HABITS AND INTERACTIONS OF SHREWS OF THE GENUS SOREX IN ALBERTA

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T6G 1R6

During the period autumn 1972 to winter 1975-76, the author has engaged in frequent studies of the Alberta soricids, genus Sorex, at Pigeon Lake in mid-province, in the Mountain Park region of west-central Alberta, and at various sites on the eastern slope of the southwest Rockies. Although most of these studies were of free or unconfined individuals, some animals were kept for brief periods (6 to 36 hours) in an aquarium for photographic purposes. Certain observations of inter and intra-specific interactions, and some experiments in feeding, were undertaken with these confined shrews.

The program of live-trapping (capture-recapture) was conducted at Pigeon Lake using both fall-type and Sherman SFA live-traps. The more successful technique - that of the Sherman traps - was employed on the Rocky Mountain eastern slope. The four species involved are listed here with the total number of individuals confined for observation:

Masked Shrew, Sorex cinereus	(5)
Wandering Shrew, S. vagrans	(8)
Water Shrew, S. palustris	(4)
Arctic Shrew, S. arcticus	(13)

Most of the notes recorded here are from the period September 11, 1974 to September 28, 1974, during which time a total of 14 shrews were observed and photographed. The aquarium used for this purpose was entirely of glass and measured 30 x 30 x 65 cm. It was prepared to receive the shrews by addition of a thin (ca. 8 to 25mm) base layer of coarse sand, on which was laid the decomposed leaf layer or leafmoss surface taken from the actual trap-site. All components of the aquarium microenvironment were taken from the trap-site, and consisted of one or two poplar (Populus balsamifera) and aspen (P. tremuloides) trunks, already decomposed centrally. The poplar log was approximately 10 cm diameter, and had deeply incised bark with cracks or irruptions.

Most logs used had some feather moss attached; sections with fungus (small puffballs, Lycoperdon pyriforme) and at least two lichens (Parmelia; Cladonia). Clumps of mosses from the microhabitat were used to maintain humidity or moisture in the aquarium. These were dampened regularly with a few cc of water sprinkled by hand. In the leaf layer, which included those of will (Salix), saskatoon (Amelanchier alnifolia) and pin cherry (Prunus pennsylvanica), much unidentified seed material (grasses) and small arachnids and insects occurred but these were not carefully inventoried.

The two specific environments trapped were the edge of a Salix marsh with sedges (Carex) and a large suprasurficial layer (false substrate of mosses on matrix of dead willow and other deadfall) beneath which the suprastory averaged 6-8 cm in height; and a steep lake-bank, southern exposure of aspen, poplar and dogwood (Cornus stolonifera), with boulder-clay/sandstone base exposed at lake-level. Trap checks were made every 30 minutes.

On Sept. 11., 1974, the 10:30 a.m. trap-check revealed a Wandering Shrew Sorex vagrans, which was placed in the aquarium. This animal immediately hid by flattening himself under one of the logs. Two artificial foods were provided, peanut butter (3gm) and sardine (6gm). The aquarium, which had been left in the direct sun for photographic purposes, was now shaded as an inducement to the shrew to come to the food. Between 11:00 a.m. and 12:15 this individual made two visits to the food-items, each of which he sampled. At 12:30, the foods were weighed: there remained 1.8gm peanut butter and 2,4 gm fish. (Later observation proved that this was stored by the shrews). There was no feeding noted from 12:30 to 2:30 when an attempt was made to photograph the shrew. The activity noted during this two hours consisted of exploration of the microenvironment, with considerable routing at the interior of the logs; grooming, which increased in frequency and duration from time of capture to 2:30, and rest, with complete immobility, which decreased in duration in the same period. When photography began, the vagrans had created a "form", or space about the size of the body, in the decomposed poplar log, where he passed inactive periods. This had been dug with the teeth (incisors) and nose, whose value as a pry and a wedge was evident not only here but when the animal explored the substrate of the aquarium, searching through twigs and mosses.

Exposure of the aquarium to sunlight increased the animal's activity and grooming times; the fur soon became damp, from condensation and from the wet parts of the microhabitat in which he hid frequently. From 3:10 until 3:20 p.m. the shrew groomed almost continuously, and scratching (in the manner of a sciurid or of a canid, with the hind foot) became a major aspect of the grooming. The incisors were used more frequently as well and close inspection revealed that parasites (ticks, Dermacentor, and fleas, species unknown) were the cause of this activity.

At 4:15 p.m. the vagrans again fed, but only for a few seconds, at each artificial food, moving from one to the other and back, then abandoning both and retreating under the log after 60-80 seconds, where grooming began once more. After 4-5 minutes of grooming, and two brief rest-periods of 60-75 seconds, the shrew moved to the interior of the poplar log where he was actively engaged, routing and digging or tunnelling, for 12-15 minutes with brief (15-10 second) pauses. The use of the nose to lift heavy objects was somewhat elephant-like. A section of poplar branch weighing 120 gms was moved, though not actually lifted, during this operation.

At 4:45 p.m. a subadult Arctic Shrew (S. arcticus) was introduced into the aquarium, and the two species remained unaware of each other for 15 minutes, while the Arctic Shrew explored the microenvironment. When the Arctic finally intruded upon the space occupied by the Wandering Shrew in the log, the latter uttered a series of high erratic squeaks and squeals, at which the arcticus immediately withdrew to a distance of about 8 cm, and resumed foraging. The Arctic Shrew fed at each of the artificial food-items for brief (30-60 second) intervals, eating more of the peanut butter than fish. No attempt was made to drag away or store either food. The food items were weighed and there remained 0.6 gm peanut butter and 2.0 gm fish. Fragments of food were scattered at each feeding, rendering these weights suspect. From 5:00 until 6:15 p.m. both shrews were active at least 70% of the time, preening from 10-25%, and routing in habitat materials from 30 to 50%. The Arctic was the less active, taking rest-periods of 45 to 360 seconds in each 20 minutes. At 6:00 p.m. a second subadult arctic shrew was introduced and the aquarium moved into the sunlight for photography.

Activity and grooming again increased, as did dampening of the fur, which appeared to trouble all three shrews.

The first meeting between the two arcticus was apparently an accidental one (they did not detect each other by smell from a distance, nor seek each other out); they approached each other "head-on" and when 2-3- cm apart, paused, sniffing, then raised noses simultaneously to an angle almost ninety degrees to the horizontal, without inclining the head. This gesture, which they continued for about 12 seconds, was again reminiscent of two tiny pachyderms. The meeting was prolonged by an olfactory investigation, although without physical contact. No aggressiveness was observed between the two at any time, except when one made physical contact with the other during foraging or feeding; this contact always resulted in a startled reaction and immediate withdrawal of 5 to 8 cm by one or both animals.

In five interactions between Arctic and Wandering shrews, the arcticus always retreated instantly at the first reaction, vocal or gestural, of the vagrans. Two principal gestures were noted: a lunge or feint toward the offending individual, usually without movement of the feet but occasionally accompanied by one or two steps forward; and a slow, side-to-side (lateral) switching of the tail, usually repeated only two or three times at one to five second intervals. The vocalization of the vagrans was limited almost exclusively to instances of confrontation or of aggression, whereas that of the arcticus was frequent and often had no apparent cause. One Arctic Shrew squeaked continually for 90 to 120 seconds, in a regular cadence, while exploring the microhabitat. Both arcticus were vocal at times during feeding. A great variety of sounds was produced, dependent upon the occasion. Vocalization increased in arcticus when they were in proximity, or when feeding together on the same artificial food-item.

It became apparent that all three shrews were acquiring food from the habitat material, in addition to, or instead of, that supplied for them. The vagrans, after initial feedings at the artificial foods, went to them infrequently and took little. Tooth marks were noted on a small (1.5 cm) fungus, Lycoperdon, and both species were observed sampling molluscs (Oreohelix) as well as several items which they dug from the inner bark and pulp of the logs, and which were not seen by the observers. In fact, much of the animals' feeding was inferred, only, from their chewing and swallowing actions.

Direct drinking was noted only once, when the vagrans took water from wet moss.

On September 13 1974, during the course of the morning's live-trapping, two Wandering Shrews (S. vagrans) and one Water Shrew (S. palustris) were introduced into the aquarium together. The behaviour of the vagrans was in every respect like that of the individual observed Sept. 11, with an initial sheltering or hiding reaction, then a prolonged period of activity, including feeding on artificial foods, and routing or tunnelling in the logs. When they met, the two vagrans reacted antagonistically, with vocalization, tail-switching , and occasionally lunges; in all cases observed, the first shrew introduced to the aquarium was the aggressor or the dominant. These animals were easily distinguishable, since one was in summer, and one in full winter pelage. There was no intraspecific recognition like that between arcticus on Sept. 11.

The Water Shrew also took shelter when introduced, but remained active beneath the habitat material and in the logs. This individual created spaces in the logs and beneath the bark of the poplar, using the snout as a pry and a wedge to loosen and raise the bark and other obstacles. One of the arcticus of Sept. 11 had also fed and sheltered between bark and log. By attaching a Pesola scale (type 491b, 300 gm) to the bark, it was ascertained that 85 gms of pull was required to lift the bark 1 cm away from the log after it had been loosened by the shrew.

The two Wandering Shrews spent at most 8 to 12 minutes of each half-hour in complete immobility; the Water Shrew was inactive for as much as 18 minutes of each half-hour. During periods of activity the vagrans appeared to forage and feed for 60 to 80% of the time, while the palustris indulged in concentrated feeding of briefer duration (ca. 50% of active time). The vagrans, when they fed on artificial foods, preferred fish or faunal matter, while the palustris took vegetal and faunal foods in approximately equal proportion.

In confrontations between Water shrew and Wndering shrew the latter was more aggressive, attempting to force the larger animal to withdraw from the interior of a poplar log. Confrontations were of 10-second to 90 second duration, and the vagrans eventually withdrew in all cases observed. The palustris reacted to such antagonisms by tail-switching an by infrequent vocalizations, but did not make lunges or other aggressive gestures.

While most interactions were accidental, at least two occurrences between vagrans and palustris had a clearly territorial motive; the vagrans and the palustris both showed preference for a decomposed inner section of the poplar log, and the Wandering Shrew (winter pelage) returned to this site frequently, attempting to claim it when it was occupied by another individual.

When the moss was dampened for the first time after introduction of the Water Shrew, this animal came immediately from 40-50 cm distance and drank extensively, flattening his belly on the wet moss. Subsequently, 20-30 cc of water was placed on bark every 30 minutes and the Water Shrew invariably reacted by sniffing or scenting, then coming directly to drink for periods of 45-90 seconds.

Interactions between cinereus, vagrans, palustris and arcticus were observed on five occasions in September 1974, and again in June and September-October 1975. The Masked Shrew (S. cinereus) most closely resembled the Wandering Shrew in grooming, feeding and activity patterns. Arctic Shrews retreated from all encounters with cinereus and vagrans. No antagonisms were noted between Arctic and Water Shrews except for startled-reaction when the smaller animal encroached upon the corporeal space of the larger (palustris). Territorial defense played no part in interactions in any species but cinereus, which appeared to occupy a small area (ca. 20 cm^2) of drier moss and leaves somewhere in the aquarium, expelling (or attempting to expel) any animal which enterred this territory. Arctic and Water shrews appeared to ignore the cinereus unless corporeal space was contested; vagrans became vocal at such confrontations, but retreated at 50% of such encounters. When the vagrans did not withdraw, the cinereus retreated 6 to 10 cm, usually vocalizing with a staccato squeaking whose pitch varied, and resembled whining, until the invader had wandered out of the area.

Food consumption could not be measured accurately for any species, due to the habits of transporting and/or storing, and of sampling. All species sampled great varieties of potential food items but - except for very small items such as seeds and unidentified insects (generally seen by the observers only when the shrew was eating them_ - none was eaten completely. The Wandering and Masked shrews preferred insect and faunal items by about 2:1 (66%); the Water and Arctic shrews took from 40% to 60% vegetal foods.

Even lichens (Parmelia, Cladonia, Cladina) were sampled. Arachnids, ants and larger coleopters were ignored, as was a dead hymenopter placed in the aquarium.

Peaks of activity, when not interrupted by photographic or other disturbances, were similar for all species. The first diurnal peak was approximately 5:30 to 8:00 a.m.; a second major peak occurred about 4:30 to 7:30 p.m. A mid-day peak was noted in all species, but this varied apparently with the individual (rather than with species, and occurred between 10:00 a.m. and 1:00 p.m. Between these peaks the shrews were active for shorter periods, and fed less frequently. The times of these peaks correspond closely to diurnal activity-peaks as determined by extensive live-trapping experiments in autumn 1972, 1973, 1974 and 1975.

KERRY WOOD

by Dorothy Broadbent
R.R. #4,
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In June this year the Alberta Natural History Society held a reception to honour one of it's earliest and most famous members, Kerry Wood. Kerry presented taped copies of his past radio talks to the Red Deer Public School District, the Red Deer Separate School District and the Red Deer County School District.

It was a fitting final gesture of the ANHS to honour the man who since 1918 has been involved with Alberta's oldest nature club. The ANHS has sacrificed the name it has used for 60 years so that FAN will no longer be hampered by the similarity of names.

The new Red Deer River Naturalists will find it difficult to produce a member with Kerry's talents. He has written 6,000 short stories, 8,000 articles, 9,000 newspaper columns, 4,000 radio talks and 300 T.V. performances.

Kerry decided to become a writer when he was 7 years old. By that time his family had moved from Esterhazy, Saskatchewan to Calgary, and then to Red Deer. In 1924, the 16 year old Kerry quit school and began to write in earnest. He practically starved during the next two years. In 1926 his luck changed and he became the local correspondent for the Edmonton Bulletin. Ten years later he married a local girl, Marjory Marshall and gave up reporting to devote all his time to his writing career and his new wife. His weekly column appeared in various Alberta newspapers until 1973, when he completely retired from newspaper work.

Kerry's writing brought him many awards. At age 17 the University of California offered him an Honorary Degree in recognition of six years of work reporting on voles, mice, rabbits and grouse. He declined this offer and he also refused to become the youngest Honorary Chieftain of the Cree Nation. He felt his youth would be a disadvantage and he was reluctant to bring about the destruction of an eagle for his headdress feathers.

He later regretted this decision, but as he grew older he received more and more recognition for his outstanding contribution to Canadian Literature. Two Governor General's Medals were awarded in 1957 for the "Great Chief" and 1955 for "The Map Maker", and a Vickey Metcalfe Award was made in 1963 for consistently good writing. His home town honored him with a Citizens Award in 1959 and in 1965 A Historical Society Award of the year. They also named a major thoroughfare after him (a dubious award for a naturalist). In 1969, he was awarded an Honorary Doctorate of Literary Laws Degree and he became a life member of the ANHS. In 1970 FAN was established, it's Corporate Member Clubs took the place of the long defunct branches of the Alberta Natural History Society. Kerry became an Honorary Member of the Federation. In 1969 an informal survey conducted by librarians, indicated that 500,000 Canadian school children read his stories that year.

Kerry's tales of the days of the early settlers, tell of his personal hardships, when he had to make use of the natural world around him in order to survive. His amusing nature stories about the wild creatures of his beloved Parkland, reveal an understanding and affection for his wild subjects. He has the gift of appealing to all age groups and the ability to educate as well as entertain. Some of his children's stories were written to help his own three children learn about his favourite wild creatures and share his and his wife's enjoyment of them.

He wrote one little book to bring attention to the Gaetz Lake Sanctuary in Red Deer. At the age of 14, the Canadian Government nominated him an Honorary Wildlife Officer to protect the Federal Bird Sanctuary in Red Deer, a task he performed for 42 years. It is ironical that his little book helped create 26 wildlife Preserves but he has been unable to bring adequate protection to his own Gaetz Lake Sanctuary. Because of our generation's short sighted greed, Kerry's Sanctuary may only live on in his book.

He now has a small Sanctuary of his own, on the banks of the Red Deer River.

He and Marjory have observed over 120 species of birds on their property, including some rarely seen in the Red Deer region, such as, Western Tanagers and Lazuli Buntings. Kerry was the first person to attract Purple Martins to Red Deer. He first observed them nesting in holes in trees near a friend's cottage at Sylvan Lake. The following year in 1919 be built a Martin House and succeeded in attracting them to Red Deer.

Despite all his successes, Kerry remains a simple man. He once said, "Honors are nothing, Honor is everything". This describes his life; through his writing he has worked to teach Canadians to understand and value the natural world around them. His own generation has honored him but has largely ignored his message. It is to be hoped that the young people of this country will be wiser than their elders.

Results of the 1976 May Species Count Day

Part II Plants and Concluding Remarks

by
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The results of the botanical portion of the May Day Species Count Day are given below. The method of presentation follows that of Part I (see September AN). Where botanical counts were received from groups or areas not reported in Part I, a listing of participan and areas visited is included. Some concluding remarks are also presented.

1. Banff: Fifty species of plants in flower were recorded.

2. Devon: Observations were made in the Town of Devon and at the Botanical Gardens. Forty-eight species of plants in flower were recorded

3. Fort McMurray: Co-ordinator - Margaret Walker.
Three naturalists from Fort McMurray spent 10½ hours (6:15 a.m. - 4:45 p.m.) recording plants in flower in their area on 30 May. From Fort McMurray they ventured north to the G.C.O.S. lease, of which Margaret states, "We knew this to be a very good spot for many wildflower some of which we have not been able to find elsewhere. The others we were able to find elsewhere but not all concentrated in the same small area(this area will be destroyed some time next year)." From the G.C.O.S. area they headed south to Gregoire Lake and ended up at the Provincial Park. They hiked approximately 10 miles. Their total of 85 species in flower was the second highest of the Count.

Participants: Marian Horrocks, Marilyn Hamlin and Margaret Walker.

4. Lethbridge: Observations were made at the Nature Reserve, Six Mile Coulee and Stirling and Tyrell Lakes. Sixty-five species were tallied.

5. Red Deer: Forty-one species were recorded.

6. Seebe: On 30 May three members of the Bow Valley Naturalists' Club made a two hour survey (6:00-7:00 p.m. and 8:00-9:00 p.m.) of the plants in flower on the Calgary Power Lease; they recorded 58 species.

Participants: Mary and Robert Smith, Keith Cole.

7. Stettler: Fifty-three species of plants were recorded.

8. Turner Valley: Fifty-five species of plants were recorded.

9. Yamnuska: The honour of recording the greatest number of different plants in flower on either of the Species Count Days goes to six members of the Bow Valley Naturalists' Club: the Smiths, the Coles and the McIvors. They recorded 93 species. Mike McIvor writes, " My wife Diane compiled the plant lists and I think they indicate the richness and diversity of the Yamnuska". We couldn't agree more!

Concluding Remarks on the 1976 Species Count Day

The response of Alberta naturalists to the call for a 1976 Species Count Day far surpassed my (DVW) most optimistic expectations. Bird, mammal and/or plant in flower counts were made in no less than 11 local Alberta areas by approximately 75 naturalists. I was particularly glad to see the amount of organization at the club or society level; for this, the co-ordinators are to be congratulated. Counts conducted at Banff-Yamnuska, Lethbridge, Red Deer. Stettler, and Turner Valley (Miller Biological Station) each had 10 or more participants. These are better province wide participation figures than we often get at FAN meetings!!

In terms of results, 195 bird species were seen (see addendum, for nine previously untallied species), 20 mammal species and 255 plant species. Each and every participating Alberta naturalist can feel justly proud of his or her contribution. (On the average, each participant contributed approximately six species to the total number observed!)

Looking ahead to next year (Count Day 1977 is only five months away) I hope we can at least duplicate the effort of 1976! I would like to see greater participation and support from Calgary and Edmonton. Also, more counts from northern and eastern Alberta would give us more complete provincial coverage. However, let's not belabor this year's shortcomings, it was a very successful count!

PLANTS IN FLOWER - MAY 30, 1976

(Nomenclature according to Moss, E.H. (1959): Flora of Alberta)

FAMILY SCIENTIFIC NAME	COMMON NAME	Banff	Devon	Ft. McMurray	Lethbridge	Red Deer	Seebe	Stettler	Turner Valley	Yamnuska
PINACEAE (Pine Family)										
Juniperus communis	Common or Ground Juniper									+
Picea glauca	White Spruce	+								
Pseudotsuga menziesii	Douglas Fir	+								
JUNCAGINACEAE (Arrow-grass Family)										
Triglochin maritima	Seaside Arrow-Grass						+			
Triglochin sp.	Arrow-grass			+						
GRAMINEAE (Grass Family)										
Agropyron cristatum	Crested Wheat Grass				+					
Agropyron smithii	Western Wheat Grass				+					
Bouteloua gracilis	Blue Grama Grass				+					
Bromus inermis	Awnless Brome				+					
Danthonia parryi	Parry Oat Grass				+					
Hordeum jubatum	Foxtail Barley				+					
Poa pratensis	Kentucky Bluegrass				+					
CYPERACEAE (Sedge Family)										
Carex aurea	Golden Sedge		1							
Carex spp.	Sedges	+			+				+	+
Eriophorum sp.	Cotton Grass			A*						
ARACEAE (Arum Family)										
Calla palustris	Water Arum, Wild Calla			A						
LILIACEAE (Lily Family)										
Allium textile	Prairie Onion				+			+		
Disporum trachycarpum	Fairy-bells		5	2		+	+		+	+
Maianthemum canadense	Wild Lily-of-the-Valley		25	5		+		+	+	
Smilacina racemosa	False Solomon's-seal					+		+	+	+
S. stellata	Star-flowered Solomon's-seal	+	25	A	+	+	+	+	+	+
S. trifolia	Three-leaved Solomon's seal			A						

FAMILY SCIENTIFIC NAME	COMMON NAME	Banff	Devon	Ft. McMurray	Lethbridge	Red Deer	Seebe	Stettler	Turner Valley	Yammuska
LILIACEAE (Lily Family)- continued										
Streptopus amplexifolius	Twisted-stalk					+				
Tofieldia glutinosa	False Asphodel							+		
Zygadenus gramineus	Death Camas						+			
IRIDACEAE (Iris Family)										
Sisyrinchium montanum	Blue-eyed Grass		+		+			+	+	
ORCHIDACEAE (Orchid Family)										
Calypso bulbosa	Calypso Orchid	+		12					+	+
Corallorhiza striata	Striped Coral-rood Orchid						+			
C. trifida	Pale Coral-root Orchid	+	5	20						+
Cypripedium calceolus	Yellow Lady's-slipper			1		+				+
Habenaria obtusata	Blunt-leaved Bog Orchid			25						
H. viridis	Bracted Bog Orchid			5			+			+
Orchis rotundifolia	Round-leaved Orchid			20						
SALICACEAE (Willow Family)										
Salix spp.	Willows				+			+		+
BETULACEAE (Birch Family)										
Alnus crispa	Green Alder									+
Alnus sp.	Alder	+								
Betula occidentalis	Water Birch									+
URTICACEAE (Nettle Family)										
Urtica gracilis	Common Stinging Nettle			A						
SANTALACEAE (Sandalwood Family)										
Comandra pallida	Pale Comandra, False Toadflax			A	+		+			+
Geocaulon lividum	Northern Comandra, False Toadflax	+		A						+

FAMILY SCIENTIFIC NAME	COMMON NAME	Banff	Devon	Ft. McMurray	Lethbridge	Red Deer	Seebe	Stettler	Turner Valley	Yammuska
POLYGONACEAE (Buckwheat Family)										
Eriogonum flavum	Yellow Umbrella-plant				+					
Rumex acetosella	Sheep Sorrel				+					
CHENOPODIACEAE (Goosefoot Family)										
Chenopodium capitatum	Strawberry Blite									+
CARYOPHYLLACEAE (Pink Family)										
Arenaria capillaris	Sandwort						+			
Arenaria spp.	Sandworts	+	25	A		+				+
Cerastium arvense	Common Mouse-ear Chickweed	+					+	+	+	+
Silene noctiflora	Night-flowering Catchfly			5						
Stellaria longifolia	Long-leaved Chickweed		25			+				
S. longipes	Long-stalked Chickweed						+			+
Stellaria sp.	Chickweed, Lesser Stitchwort			A						
RANUNCULACEAE (Crowfoot Family)										
Actaea rubra	Baneberry		25	6		+	+			+
Anemone canadensis	Canada Anemone							+	+	
A. multifida	Cut-leaved Anemone	+		5	+		+			+
A. occidentalis	Chalice-flower, Western Anemone								+	
A. parviflora	Northern or Few-flowered Anemone	+		2						+
A. patens	Prairie Crocus or Anemone	+					+		+	+
Aquilegia brevistyla	Blue Columbine		6							
Caltha palustris	Marsh Marigold			A						
Clematis verticellaris	Blue Clematis	+				+	+		+	+
Coptis trifolia	Goldthread			1						
Delphinium bicolor	Low Larkspur						+			+
D. glaucum	Tall Larkspur					+			+	
D. nelsonii	Nelson Larkspur								+	
Ranunculus acris	Tall Buttercup							+		
R. cardiophyllus	Heart-leaved Buttercup				+					+

FAMILY SCIENTIFIC NAME	COMMON NAME	Banff	Devon	Ft. McMurray	Lethbridge	Red Deer	Seebe	Stettler	Turner Valley	Yamnuska
RANUNCULACEAE (Crowfoot Family) continued										
Ranunculus cymbalaria	Creeping Buttercup		25	A			+	+		
R. eschscholtzii	Mountain Buttercup								+	
R. flammula	Creeping Spearwort									+
R. glaberrimus	Early Buttercup									+
R. rhomboideus	Prairie Buttercup						+			
R. sceleratus	Celery-leaved Buttercup		25							
Ranunculus sp.	Buttercup									+
Thalictrum occidentale	Western Meadow Rue							+		
Thalictrum venulosum	Veiny Meadow Rue		25	10		+	+			+
Thalictrum sp.	Meadow Rue			2				+		
FUMARIACEAE (Fumitory Family)										
Corydalis aurea	Golden Corydalis	+	3	A						+
C. sempervirens	Pink Corydalis			+						
CRUCIFERAE (Mustard Family)										
Arabis hirsuta	Hairy Rock Cress						+			
Arabis spp.	Rock Cresses	+								+
Barbarea vulgaris	Yellow Rocket			+			+			
Braya humilis	Braya								+	+
Capsella bursa-pastoris	Shepherd's-purse	+	1		+					+
Descurainia sophia	Tansy Mustard, Flixweed		25		+					
Draba cana	White Draba									+
Draba spp.	Drabas	+			+					+
Erysimum asperum	Prairie Rocket				+					
E. inconspicuum	Small-flowered Rocket									+
Lesquerella arenosa	Bladder-pod								+	
Physaria didymocarpa	Double Bladder-pod									+
Smelowskia calycina	Smelowskia								+	
Thlaspi arvense	Stinkweed, Pennycress	+	25	A	+					
?	Mustard (white)			+						
CRASSULACEAE (Orpine Family)										
Sedum rosea	Rose-root Stonecrop									+

FAMILY SCIENTIFIC NAME	COMMON NAME	Banff	Devon	Ft. McMurray	Lethbridge	Red Deer	Seebe	Stettler	Turner Valley	Yamnuska
SAXIFRAGACEAE (Saxifrage Family)										
Chrysoplenium iowense	Golden Saxifrage			15						
Heuchera cylindrica	Alum-root							+		+
Mitella nuda	Bishop's-cap, Mitrewort		5	A						
Ribes glandulosum	Skunk Currant			1						
R. hudsonianum	Wild Black Currant	+				+				
R. lacustre	Bristly Black Currant	+								
R. oxyacanthoides	Wild Gooseberry	+		5		+	+		+	+
Saxifraga bronchialis	Spotted Saxifrage									+
S. oppositifolia	Purple Saxifrage									+
ROSACEAE (Rose Family)										
Amelanchier alnifolia	Saskatoon	+	25	A		+	+	+	+	+
Chamaerhodos erecta	Chamaerhodos						+			
Dryas drummondii	Yellow Dryad	+							+	+
D. hookeriana	White Dryad	+								+
Fragaria virginiana	Wild Strawberry	+	25	A		+	+	+	+	+
Geum triflorum	3-flowered Avens, Prairie Smoke	+			+	+	+	+	+	+
Potentilla anserina	Silverweed		5	1	+	+	+	+		+
P. concinna	Early Cinquefoil	+					+	+		+
P. fruticosa	Shrubby Cinquefoil			A		+		+		+
P. gracilis	Graceful Cinquefoil									+
P. hippiana (?)	Wooly Cinquefoil						+			
P. nivea	Alpine Cinquefoil								+	+
P. tridentata	3-toothed Cinquefoil			A						
Prunus pensylvanica	Pin Cherry		25	A				+		+
Prunus virginiana	Choke Cherry		25	1		+	+	+		+
Rosa acicularis	Prickly Rose			A	+	+				
R. arkansana	Prairie Rose							+		
R. woodsii	Common Wild Rose							+		
Rosa spp.	Wild Roses		60							
Rubus acaulis	Dwarf Raspberry	+		A						+

FAMILY SCIENTIFIC NAME	COMMON NAME	Banff	Devon	Ft. McMurray	Lethbridge	Red Deer	Seebe	Stettler	Turner Valley	Yamnuska
ROSACEAE (Rose Family) continued										
Rubus chamaemorus	Cloudberry, Baked-apple Berry			3		+				
R. pubescens	Dewberry	25		A		+			+	+
R. strigosus	Wild Red Raspberry			A		+				
LEGUMINOSAE (Pea Family)										
Astragalus aborigonum	Indian Milk Vetch	+								+
A. bisulcatus	Two-grooved Milk Vetch		25		+					
A. crassicarpus	Ground Plum						+			
A. decumbens	Timber Milk Vetch						+			
A. goniatus	Purple Milk Vetch					+	+			
A. missouriensis	Missouri Milk Vetch				+					
A. pectinatus	Narrow-leaved Milk Vetch				+					
A. vexilliflexus	Few-flowered Milk Vetch								+	
Astragalus sp. (?)	Low Vetch							+		
Caragana arborescens	Common Caragana				+					
Hedysarum alpinum	Alpine or American Hedysarum						+	+		
H. boreale	Northern Hedysarum			3						
H. mackenzii	Mackenzie's Hedysarum		25		+		+	+		+
H. sulphurescens	Yellow Hedysarum						+			+
Lathyrus ochroleucus	Vetchling or Wild Sweet Pea		25	A			+	+		+
L. venosus	Wild Pea Vine		1				+	+		
Lupinus argenteus	Perennial Lupine								+	
Medicago sativa	Alfalfa				+					
Melilotus alba	White Sweet Clover				+					
Oxytropis sericea	Early Yellow Loco-weed	+			+		+			+
O. splendens	Showy Loco-weed								+	
O. viscida	Sticky or Viscid Loco-weed									+
Thermopsis rhombifolia	Buffalo or Golden Bean				+	+	+	+	+	
Trifolium hybridum	Alsike Clover		25	3						
T. repens	White Clover	+		1						
Vicia americana	Wild Vetch		2	A	+			+		
Vicia sparsifolia	Narrow-leaved Vetch							+		

FAMILY SCIENTIFIC NAME	COMMON NAME	Banff	Devon	Ft. McMurray	Lethbridge	Red Deer	Seebe	Stettler	Turner Valley	Yamnuska
GERANIACEAE (Geranium Family)										
Geranium bicknellii	Bicknell's Geranium			A						
G. richardsonii	Wild White Geranium									+
LINACEAE (Flax Family)										
Linum lewisii	Wild Blue Flax				+			+		+
POLYGALACEAE (Milkwort Family)										
Polygala paucifolia	Fringed Polygala			A						
EUPHORBIACEAE (Spurge Family)										
Euphorbia esula	Leafy Spurge				+					
ACERACEAE (Maple Family)										
Acer douglasii	Mountain Maple									+
MALVACEAE (Mallow Family)										
Sphaeralcea coccinea	Scarlet Mallow				+					
VIOLACEAE (Violet Family)										
Viola adunca	Early Blue Violet	+	25	A		+	+	+	+	+
V. nephrophila	Bog Violet			5		+				+
V. nuttallii	Yellow Prairie Violet								+	
V. rugulosa	Western Canada Violet	+	25	5		+	+			+
CACTACEAE (Cactus Family)										
Mamillaria vivipara	Cushion or Ball Cactus				+					
Opuntia polyacantha	Prickly Pear Cactus				+					
ELAEAGNACEAE (Oleaster Family)										
Elaeagnus commutata	Silver-berry, Wolf Willow		25		+		+	+	+	
Shepherdia canadensis	Canadian Buffalo-Berry	+							+	+

FAMILY SCIENTIFIC NAME	COMMON NAME	Banff	Devon	Ft. McMurray	Lethbridge	Red Deer	Seebe	Stettler	Turner Valley	Yamnuska
ONAGRACEAE (Evening Primrose Family)										
Epilobium angustifolium	Common Fireweed							+		
Gaura coccinea	Scarlet Butterfly-weed				+					
Oenothera caespitosa	Butte Primrose				+					
ARALIACEAE (Ginseng Family)										
Aralia nudicaulis	Wild Sarsaparilla		25	A		+				
UMBELLIFERAE (Carrot Family)										
Heracleum lanatum	Cow Parsnip				+					
Musineon divaricatum	Musineon				+		+			
Zizia aptera	Meadow Parsnip, Heart-leaved Alexanders						+	+	+	+
CORNACEAE (Dogwood Family)										
Cornus canadensis	Bunchberry, Dwarf Dogwood	+	25	A		+		+		
C. stolonifera	Red-osier Dogwood, Kinnikinnick		25	A		+		+		
PYROLACEAE (Wintergreen Family)										
Pyrola asarifolia	Common Pink Wintergreen		3							
ERICACEAE (Heath Family)										
Andromeda polifolia	Bog Rosemary			+						
Arctostaphylos uva-ursi	Common Bearberry, Kinnikinnick	+		A			+		+	+
Kalmia polifolia	Mountain Laurel			3						
Ledum groenlandicum	Common Labrador Tea		25	A						
Oxycoccus microcarpus	Bog Cranberry			A						
Vaccinium caespitosum	Dwarf Bilberry									+
V. myrtilloides	Blueberry		25	A						
V. vitis-idaea	Bog Cranberry or Lingonberry		25							

FAMILY SCIENTIFIC NAME	COMMON NAME	Banff	Devon	Ft. McMurray	Lethbridge	Red Deer	Seebe	Stettler	Turner Valley	Yamnuska
PRIMULACEAE (Primrose Family)										
Androsace chamaejasme	Sweet-flowered Androsace						+			+
A. septentrionalis	Fairy Candelabra, Pygmy Flower	+	25				+		+	+
Dodecatheon conjugens	Shooting Star	+					+	+		+
D. radicatum	Shooting Star	+							+	+
Dodecatheon sp.	Shooting Star			A		+		+		
Primula mistassinica	Dwarf Canadian Primrose	+							+	
Trientalis borealis	Star-flower			A						
POLEMONIACEAE (Phlox hoodii)										
Phlox hoodii	Moss Phlox						+			
Polemonium pulcherrimum	Jacob's-ladder								+	
P. viscosum	Skunkweed								+	
HYDROPHYLLACEAE (Waterleaf Family)										
Phacelia sericea	Scorpion Weed								+	
BORAGINACEAE (Borage Family)										
Cynoglossum officinale	Hound's-tongue				+					
Lappula echinata	Blue-bur (white)			3						
Lithospermum incisum	Narrow-leaved Puccoon				+		+			
L. ruderale	Hoary Puccoon, Wooly Gromwell						+		+	+
Mertensia paniculata	Tall Lungwort		25	A		+		+	+	
Myosotis alpestris	Alpine Forget-me-not								+	
LABIATAE (Mint Family)										
Glecoma hederacea	Ground Ivy			10						
SCROPHULARIACEAE (Figwort Family)										
Castilleja miniata	Common Red Paintbrush	B								+
C. rhexifolia	Red Paintbrush								+	
C. raupii	Northern Pink Paintbrush			2						
Collinsia parviflora	Blue-eyed Mary	B								

FAMILY SCIENTIFIC NAME	COMMON NAME	Banff	Devon	Ft. McMurray	Lethbridge	Red Deer	Seebe	Stettler	Turner Valley	Yamnuska
SCROPHULARIACEAE (Figwort Family)	continued									
Penstemon albidus	White Beard-tongue				+					
P. confertus	Yellow Beard-tongue								+	
P. nitidus	Smooth Blue Beard-tongue				+		+		+	+
P. procerus	Slender Blue Beard-tongue							+		
OROBANCHACEAE (Broom-rape Family)										
Orobanche fasciculata	Clustered Broom-rape				+					
LENTIBULARIACEAE (Bladderwort Family)										
Pinguicula vulgaris	Common Butterwort	+								+
PLANTAGINACEAE (Plantain Family)										
Plantago sp.	Plantain							+		
RUBIACEAE (Madder Family)										
Galium boreale	Northern Bedstraw							+	+	
CAPRIFOLIACEAE (Honeysuckle Family)										
Linnaea borealis	Twin-flower					+		+		
Lonicera dioica	Twining Honeysuckle			A		+		+		
L. involucrata	Bracted Honeysuckle	+	25	10		+				+
L. tatarica	Tartarian Honeysuckle				+					
L. villosa	Fly Honeysuckle			10						
Symphoricarpos albus	Snowberry				+					
Viburnum edule	Low-bush Cranberry	+	25	A		+				+
V. trilobum	High-bush Cranberry		25	A						
ADOXACEAE (Moschatel Family)										
Adoxa moschatellina	Moschatel			5						
COMPOSITAE (Composite Family)										
Achillea millefolium	Yarrow				+			+	+	
Antennaria dimorpha	Prairie Pussy-toes or Everlasting				+					

FAMILY SCIENTIFIC NAME	COMMON NAME	Banff	Devon	Ft. McMurray	Lethbridge	Red Deer	Seebe	Stettler	Turner Valley	Yamnuska
COMPOSITAE (Composite Family) continued										
Antennaria neglecta	Broad-leaved Pussy-toes			20						
A. nitida	Small-flowered Pussy-toes		25				+			+
A. parviflora	Low Pussy-toes							+		+
A. rosea	Rosy Pussy-toes								+	+
Antennaria spp.	Pussy-toes or Everlastings							+		
Arnica alpina	Alpine Arnica									+
A. cordifolia	Heart-leaved Arnica								+	+
Arnica sp.	Arnica			2						
Artemisia cana	Sagebrush				+					
A. ludoviciana	Prairie Sagewort				+					
Chrysopsis villosa	Golden Aster							+		
Cirsium arvense	Creeping or Canadian Thistle				+					
Erigeron caespitosus	Tufted Fleabane								+	
E. compositus	Cut-leaved Fleabane	+					+		+	+
Gaillardia aristata	Brown-eyed Susan				+					
Grindelia squarrosa	Gumweed				+					
Gutierrezia sarothrae	Broomweed				+					
Hymenoxys acaulis	Butte Marigold, Stemless Rubber-plant				+					
H. richardsonii	Colorado Rubber-plant				+					
Matricaria matricarioides	Pineapple-weed		10	A						+
Petasites palmatus	Palmate-leaved Coltsfoot			1						
P. sagittatus	Arrow-leaved Coltsfoot	+				+			+	+
Petasites sp.	Coltsfoot							+		
Senecio canus	Prairie Groundsel				+		+			+
S. congestus	Marsh Ragwort			2						
S. plattensis	Prairie Ragwort						+			
Tanacetum vulgare	Common Tansy					+				
Taraxacum officinale	Common Dandelion	+	70	A	+	+	+	+	+	+
Tragopon dubius	Goat's-beard				+					
	Totals	50	48	85	65	41	58	53	55	93
	Number of different species				255					

*A = Abundant

1976 MAY SPECIES COUNT DAYS: An Addendum

by
Mr. John R. Gulley
Co-ordinator
Fort McMurray, Alberta

Mr. Kenneth A. Zurfluh and I conducted surveys during both May 29 and May 30, 1976. These surveys were undertaken at a site approximately 23 miles north of Fort McMurray. They covered a variety of habitats including man made ponds, about a 15,000 foot section of th Athabasca River and a natural pond within the boreal forest. The surveys involved walking and driving around approximately a 5 sq. mi area of Lease 86. On both May 29th and May 30th, 51 species were sighted with a total of 65 species for both days.

May 29

Red-necked Grebe	1	Common Flicker	1
Pied-billed Greve	1	Eastern Kingbird	1
Canada Goose	83	Eastern Phoebe	2
Mallard	3	Yellow-bellied Flycatcher	1*
Pintail	3	Least Flycatcher	3
Green-winged Teal	11	Tree Swallow	3
Blue-winged Teal	8	Bank Swallow	4
American Wigeon	1	Barn Swallow	3
Northern Shoveler	18	Common Raven	7
Ring-necked Duck	6	Common Crow	11
Common Goldeneye	3	American Robin	8
Bufflehead	4	Common Starling	21
American Kestrel	8	Yellow Warbler	13
Sandhill Crane*	1	Northern Waterthrush	1
Sora	4	Mourning Warbler	1
American Coot	2	Canada Warbler*	1
Killdeer	16	Red-winged Blackbird	12
Common Snipe	3	Brown-headed Cowbird	12
Spotted Sandpiper	5	Savannah Sparrow	1
Greater Yellowlegs	3	Chipping Sparrow	2
Lesser Yellowlegs	20	Clay-colored Sparrow	3
White-rumped Sandpiper*	1	White-throated Sparrow	2
Baird's Sandpiper*	3	Fox Sparrow*	1
Wilson's Phalarope	30	Swamp Sparrow	4
Herring Gull*	25	Song Sparrow	15
California Gull	28		

May 30

Common Loon	3	Herring Gull	22
Red-necked Grebe	1	California Gull	18
Pintail	3	Bonaparte's Gull	4
Green-winged Teal	5	Black Tern	3
Blue-winged Teal	13	Common Flicker	1
American Wigeon	2	Eastern Phoebe	2
Northern Shoveler	19	Least Flycatcher	1
Ring-necked Duck	1	Tree Swallow	2
Common Goldeneye	1	Bank Swallow	3
American Kestrel	2	Barn Swallow	2
Sandhill Crane	1	Common Crow	1
Sora	2	Yellow Warbler	12
American Coot	4	Ovenbird	1
Semipalmated Plover*	3	Northern Waterthrush	2
Killdeer	8	Canada Warbler	1
Common Snipe	2	Yellow-headed Blackbird	1
Spotted Sandpiper	5	Red-winged Blackbird	12
Lesser Yellowlegs	12	Brewer's Blackbird	4
Semipalmated Sandpiper	6	Common Grackle	2
Least Sandpiper	2	Savannah Sparrow	2
Pectoral Sandpiper	1	Clay-colored Sparrow	2
White-rumped Sandpiper	2	Lincoln's Sparrow	1
Baird's Sandpiper	4	Song Sparrow	16
Short-billed Dowitcher	1	Common Starling	14
Stilt Sandpiper*	3	American Robin	5
Wilson's Phalarope	30		

*previously unreported Count Day species. (D.V.W.)

Editor's Note: The above report was received recently by Chip Weseloh, who has edited it, and added the species not found in previous reports to his comments at the end of the previous article. M.K.M.

HIGHLIGHTS OF BIRD BREEDING SEASON FOR SOUTHERN ALBERTA - 1976.

by
Rudi Butot
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Calgary, Alberta.

The dry cycle continued for the Calgary area during the summer, and although the summer was rather cool and cloudy, not enough rain fell to replenish the dried up sloughs. The deeper sloughs of former years which already had turned to shallow bodies of water in the spring now dried up completely, and were covered by vegetation. Only those areas hooked into the irrigation systems still contained water, and even some of those were much lower than in previous years. All this of course resulted in lower numbers of many, if not most bird species in the Calgary area.

Two Common Loons were reported from Rocky Mountain House on July 24, while a pair with two young were reported from Hinton, and two pairs with three young were seen near Caroline on August 14, 15 and 24. Red-necked Grebes nested in the Irricana area, and a maximum of four occupied nests were reported in June, and three adults with two young were seen in the early part of August. An adult with two young was also reported from Caroline on August 15. Twenty Horned Greves were seen near Irricana on June 23, with only one nesting pair reported. Twenty were seen on July 12, but no young or nests were reported. EaredGrebes were reported from many areas. From Calgary came reports of 47 nesting pairs just south of the city. At Irricana 35 were seen June 26 and 50 on July 2, but no young or nests were seen. From Olds came a report of 14 birds. Near Burdett two flocks were seen,one of 300 birds not nesting on July 4, while on a nearby reservoir 77 nesting pairs were observed that same day. Twelve occupied nests were seen at Milo on August 2, while eight adults with two young were reported from Delacour on August 7. Twelve birds were also reported from Caroline on August 12. A few Western Grebes were reported. At Keoma seven on June 10, one near Milo on June 19 and seven on August 12, while two were seen near Irricana on July 17. No Pied-billed Grebes were reported during June, July, or August. White Pelicans were again seen at McGregor Lake this summer, 161 on July 3 and seven on August 2. This year young Double-crested Cormorants were reported

from Irricana area. Nine black adults, five brown birds and six mottled young with white breasts were seen on June 10, six adults and one immature on July 2 and 17, and 15 adults with four immatures on August 1. From Burdett came a report of four on July 4, and one from Vauxhall on July 3. The larger concentrations of Black-crowned Night Herons were reported as follows: seven near Keoma on June 10, and four adults and one immature from Irricana on July 17. American Bitterns were seen twice during June near Namaka.

Forty Gadwalls were reported from Irricana on June 23, and eight pairs on July 2. Cinnamon Teals were seen as follows: one near Balzac on June 19, three at Frank Lake on July 4, and on the same day three at Brant. Reports of Redheads showed three pairs at Irricana on June 6, two pairs at Hussar on June 19, one at Olds on June 24, and four at Nordegg on July 8. Canvasback reports showed forty at Irricana on June 6 and 10, with seven downies on the latter day, sixty on June 26 with many young, and 120 July 2. Another sighting came from Olds, two on June 24. A Greater Scaup pair was reported from Calgary on June 5. From Irricana came sightings of White-singed Scoters, nine males and three females on June 6, and eight pairs on June 19. A female Hooded Merganser was reported from Caroline on August 14 and 15. One Common Merganser female with up to twenty-one immatures in tow was reported from Calgary on June 25,26, and July 1 and 24.

Three Turkey Vultures were seen near Elkwater on July 27. Sharp-shinned Hawk sightings showed one near Sundre on June 24, one in Calgary on July 27, and one also on August 20. One Cooper's Hawk was reported from Longview on August 1, while one immature was reported from Lousana on August 7, and another from Calgary on August 27. Both Swainson's Hawks and Red-tailed Hawks were fairly well represented in southern Alberta during the summer. One Ferruginous Hawk was sighted near Irricana on July 17. Two immature Bald Eagles were seen south of Caroline on August 14 and 15. and one on August 24 from the same place. Ospreys were reported as follows:

two nesting at Canmore on May 24
one at Seebe on June 13
one near Exshaw on June 20 and July 2
one near Banff on July 17
one pair with possibly two young in a nest at Kananaskis Lakes on July 13.

Prairie Falcon sightings were of one at Calgary on June 9, one at Crowfoot on July 25, and one at Cochrane also on July 25. From Calgary came reports of one Merlin on August 16 and one adult with one immature on July 11. The largest numbers of Kestrels were reported from Caroline, where from six to eight were seen on July 24, August 20 and 24. A Ruffed Grouse with five immatures was seen in Calgary on June 24, and one female with one immature on July 27. A White-tailed Ptarmigan with one young was reported from the Longview area on July 24. Gray Partridge with numerous young were reported from Burdett on July 4, Calgary on July 16 and August 1, 5, and 8. Three Sandhill Cranes were seen near Bearberry on June 24, and one adult with one young was reported from Zama City in the north. Sora were well reported from the Calgary and Priddis areas. The largest numbers were reported from Priddis on July 25, when a total of twenty downies and immatures were seen in one marshy area.

Two Piping Plovers were seen east of Balzac on June 19 and July 2, and the possibility of nesting in that area connot be excluded at present. One Long-billed Curlew was reported from Burdett on July 4, while an Upland Sandpiper was seen near Brooks on July 25. Spotted Sandpipers were well reported this summer from such places as Bergen, Sundre, Burdett, Calgary, Caroline, Conrich, Irricana, and Delacour. Solitary Sandpipers although not as numberous as the previous species were also well represented. One from Hinton on July 6, from Irricana three and nine on August 2 and 7 respectively, five from Caroline on August 15, five from Priddis on August 18, and six from Delacour on August 7. Greater Yellowlegs returned to the Calgary area, on their way south, on June 19, and appeared to have had a good nesting season. Some of the larger numbers reported were 120 from Delacour on August 7, 30 at Lousana on August 7, and 37 at Irricana on August 8. The Lesser Yellow-legs also returned on June 19. At Irricana 33 on July 17, Cheadle 30 on July 3, Delacour 100 on August 7, Bashaw 60 on August 7, at New Norway 25 on that same day as well as 70 at Buffalo Lake. Willet numbers were low this summer. Four adults and one immature at Irricana on June 26 and July 2, and eight on July 17, two at Conrich on June 26 and August 2, two at Keoma on July 2, two adults and two immatures at Balzac on July 2, and three and four at Delacour on July 18 and August 7 respectively. Baird's and Least Sandpipers were back in goodly numbers shortly after the middle of July. One Western Sandpiper was seen near Delacour on July 18, while Sanderlings were

reported in two's and three's from Irricana and Balzac on July 17 and 18. Marbled Godwits were well reported, with the largest flock from Brant on July 4, when more than 500 were counted. Stilt Sandpipers were reported as follows:

Cheadle three on July 3, thirty-one on August 2, Balzac fifteen on July 18, Brant three on August 2, Delacour eight on August 7, and two at Irricana on August 8. American Avocets with young were reported from Irricana, Balzac, Delacour, Conrich, Cheadle, Brant, and Strathmore. Seven to eleven Northern Phalaropes, probably nonbreeding, were seen near Irrican from June 6 until July 17.

Owl reports were rather meager this summer. One Burrowing Owl was seen near Burdett on July 4, and one near Duchess on August 29. Three fledged Great Horned Owls from Irricana on August 7. Great Grey Owl reports showed one west of Turner Valley on June 20 and one near Caroline on June 24. A Barred Owl was sighted near North Habay, in the north, on July 19. Five Common Nighthawks were reported from Caroline on August 14, while in ones and two's they were reported from Calgary on June 10 and Sundre on June 24. Several reports of Rufous Hummingbirds were received from Calgary, Seebe, and Bragg Creek. A female Calliope Hummingbird on a nest was reported from Seebe on June 20. Two American Dippers feeding three young were reported from west of Turner Valley on June 20.

One Boreal Chickadee was seen near Jasper on July 7, while near Caroline four were seen on August 20 and five on August 24. Gray Catbirds and Brown Thrashers, as singles, were reported from Calgary in June and July. Yellow and Yellow-rumped Warblers were the two most often reported warbler species for southern Alberta. Two males and one female Bobolink were reported from Bragg Creek on June 20. An American Redstart was seen near Sylvan Lake on August 16, while Northern Orioles were reported in small numbers throughout the summer. Large numbers of Lark Buntings were reported from Burdett, Vauxhall and Tilley, while six Lark Sparrows were sighted near Burdett on July 3 and 4. One McCown's Longspur was reported from Vauxhall on July 3, while large numbers of Chestnut-collared Longspurs were seen throughout the summer at Balzac, Armada and Burdett.

A rare Sharp-tailed Sparrow was reported from a marsh southeast of Priddis on July 24 and 25, and although it could not be flushed, its song was heard many times and also recorded.

More detailed tabulations for the summer months can be found in the summer issues of The Calgary Field Naturalist.

GREAT CRESTED FLYCATCHER SIGHTINGS

by
Ken Trann
R.R. #2
Kingman, Alberta

On June 4, 1976 while walking in the woods on my acreage seven miles north-west of Kingman, I heard a strange bird song coming from some willows, which were bordering a woodland slough. After investigating only a few minutes I located a bird which reminded me of a Western Kingbird (Tyrannus verticalis) but wasn't; there were no white markings on the tail, and it was unlikely a Western Kingbird would have been found in this type of woodland habitat. The bird remained in view only a minute or so, and then flew off into the woods. I returned home, checked Peterson's Field Guide, and listened to Peterson's record of bird songs. I was amazed to discover that the bird I had observed was a Great Crested Flycatcher (Myiarchus crinitus) I had never seen, or heard, one before. In order to be sure I tracked down the bird again and this time positively identified it: the rufous tail mentioned in the field guide was a very obvious field-mark.

The Flycatcher remained in the area all summer, allowing me many opportunities for observation. Following are some of those observations, taken from my notebook:

June 9 — The Crested Flycatcher hs been here since June 4. I followed him around for an hour tonight. His territory is quite large, with a number of nest holes, (including 4 large birdboxes - duck-size- one of which he entered!) but there is no female.

June 12 — The Flycatcher's song (the single note) sounds like the first half of a Wolf-Whistle.

July 1 — The Crested Flycatcher was in the yard again. The last time we (my wife, Janice, and myself) saw him was on June 20. We had started to believe he had vacated the area.

July 9 — Two Crested Flycathers showed up today. They examined two of the large birdhouses and one of

the birds checked out a small box put there for swallows. I watched the two birds for about half an hour and then they disappeared into the woods. I am assuming these birds are a mated pair. Perhaps they'll nest. (I am wondering if this is a new pair, or if the male that has been around has found a female?).

July 12 Back to one Crested Flycatcher since the ninth. But tonight, this one Flycatcher had been singing for a short while when suddenly another one appeared, which was immediately chased away by the original bird. Seems like there are two males!

I checked all the bird boxes for a nest but found nothing there. I've also checked out some holes in a few of the dead trees around here, but all I found was a Flying Squirrel and a family of Red Squirrels.

July 22 Heard the Crested Flycatcher again. He was singing for about fifteen minutes and then either stopped or left the immediate area. The female (or "other" bird) has not been seen since July 9 (if we count the July 12th bird as a male). There has been only one bird since July 12....

And there was only one bird on the following dates: August 19, 21, 24, 25, 27, and 28. August 28 is the date of the last observation.

Interested birders should be on the look-out for the Great Crested Flycatcher. It is quite possibly more common than it seems to most people. For instance, I believe there were <u>three</u> Flycatchers of this species visiting us this summer. The observations of July 9 and 12 suggest this to me, but obviously I have no proof.

Anyway....KEEP LOOKING! And you may be as lucky as we were.

THE ALBERTA ORNITHOLOGICAL RECORDS COMMITTEE: ITS FORM AND FUNCTION.

by
D.V. (Chip) Weseloh
Secretary A.O.R.C.
Provincial Museum of Alberta
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In 1973 the Alberta Ornithological Records Committee (henceforth A.O.R.C.) was organized as a permanent standing committee of the Federation of Alberta Naturalists. It was originally conceived as a central receiving body for records of rare and unusual birds observed in Alberta. In its first three years of operation, the Committee has received the following number of submissions for adjudication (Smith 1975, 1976 and AORC files):

1973 - 1
1974 - 4
1975 - 11

This is a small but indeed positive confirmation of its importance to Alberta ornithology.

During the last 12 months I have had an opportunity to review the accumulated files of the A.O.R.C. They make for fascinating reading, are open to the public and contain, at present, among other things, species accounts of no less than 18 bird species seldom seen in Alberta. Some of the records adjudicated to date include the House Finch, Oldsquaw, Nashville Warbler, Western Sandpiper, White-faced Ibis, Green Heron and Red-bellied Sapsucker: all very rare birds in Alberta.

On reading through the files, however, I began to recall several significant records of birds in Alberta of which I had heard but which were not represented in the A.O.R.C. files. On talking with the individuals who had made some of these sightings, I was somewhat surprised to learn that they were either not aware of the A.O.R.C. or unsure of how to submit their sightings. The purpose of this short note then is to publicize the A.O.R.C., its purpose and to instruct naturalists on how they may contribute to the success of the A.O.R.C. and knowledge of ornithology in Alberta.

Function of A.O.R.C.

As defined at its inaugural meeting of 22 September 1973, the two main functions of the A.O.R.C. are:

1. To serve as a repository for submission of records of birds from any and all parts of Alberta. These records may take any form but is is recommended that they be from one region and for periods up to one year. A submission such as this is not intended to replace nor to be used as a substitute for, the individual record cards currently being used by several Alberta naturalist groups as well as by the Provincial Museum.

2. To examine, when requested to do so, the documentation of records of rare and unusual species of birds in Alberta. When serving thus, as an adjudicating body, the Committee will place each record in one of the following categories:

   I Substantiated Record - A submission accompanied by full data (e.g. place, date, observer, weather, etc.) and one or more of the following: a specimen, a fragment of a specimen from which the species can be identified beyond doubt, a photograph clearly showing identifying features of the species.

   II Documented Observation - A submission which includes a written description of the bird made at the time of observation which leaves no doubt as to the identity of the bird. The description would be in the form of the original pages of the observer's field notebook or photostat copy thereof. Supporting evidence in the form of sketches, tape recording, etc. may also be submitted.

   III Documented Nesting Record - A written description made at the location of the nest, its site, its contents and the attendant birds, which leaves no doubt as to its identity. Supporting evidence in the form of sketches, etc., may also be submitted.

   IV Unsubstantiated Observation - A submission which does not fully meet any of the above standards.

Examples of the first type of submission received to date are:

1) A listing of summer bird observations at Elk Island Park
2) a checklist of birds observed at Sir Winston Churchill Provincial Park, May-September 1976
3) birds observed in southwestern Alberta, June 9-14, 1973 (submitted by an Ontario birdwatcher on Alberta Holiday)
4) individual reports of Black-headed Grosbeaks, a Great Grey Owl and a Blue Jay at various Alberta locations.

For a records committee to function as a repository for records of birds (any birds, not just unusual ones) from any and all parts of a province is, perhaps, not in keeping with the usual image of such a committee. However, I must emphasize that this is, indeed, one of the designated functions of our A.O.R.C. and naturalists should not be hesitant to make such submissions.

The second type of submission, records to be adjudicated, with which most of us are undoubtedly more familiar, includes reports of sightings of Oldsquaw, House Finch, Great Crested Flycatcher, Western Sandpiper, Ruff, Surfbird, Thayer's Gull, and nearly a dozen other species at various locations in Alberta.

How to make a submission

Making a submission to the A.O.R.C. is really quite a simple matter. In the first category of submissions, the Committee has received everything from a mere checklist with location and time period indicated to a page by page species account of the birds seen in a given area. Either of these is adequate. In the second category, it is necessary to spell out all the details of the sighting as well as is possible. This means that the date, location, time and observer(s) should be listed along with field notes made at the time of sighting. Photos of the bird(s) and/or tape recordings of its song or call also help substantiate the sighting. Additional remarks might also include other birds present, pertinent weather data, field notes of other observers present, duration of observation, etc. In other words, make the documentation as complete as you possibly can. If the bird gets up, flies away and is never seen in Alberta again, the only record of it will be your account!

For the purposes of illustration, I have included two examples of submissions for adjudication. The first was placed in Category II; Documented Observation: no photos, tape recordings, specimens or other material evidence of the record were submitted. The second submission was placed in Category I; Substantiated Observation: several colour slides, a Xerox copy of the observer's original field notes and a corroborative report of another observer and a Xerox of his original field notes were also included.

Example #1

From April 28 to May 8, 1975, I made daily, and lengthy observations of a bird which gorged itself at my garden feeder several times a day. Since this feeder is about 15 ft. from the window, close scrutiny of every detail was possible, with both Peterson's and Robbin's field guides, and binoculars in hand.

The Bird...

Head.. no notable markings, very fine buffy eye-ring, giving eye large appearance. Bill.. stubby and finch-like, upper mandible darker than lower (grey), and downward curved, almost overlapping lower.

Breast & Flanks.. ivory colored, heavily striped in brown, from chin to under-tail coverts.

Back.. grey-brown, with faint darker striping from bill to tail coverts.

Wings.. grey-brown with secondaries edged in white, primaries much less edging, two white wing bars.

Legs.. black

Tail.. long and slim, with notch, as shown in Peterson's guide (p.274), very evident when it took a sun bath and spread its tail, which was grey-brown with no white.

Habits.. aggressive.. would not tolerate sparrows on feeder, and drove them off with wings spread, head lowered, feathers fluffed, and beak open.

Habits-- Cont'd

Also would not tolerate sparrows near it when resting in bushes, where it always went to preen and sharpen its beak after eating. Note: Rudi Butot, also of CFNS, who reported on the male House Finch in June, 1973, confirms that the male also displayed similar aggressive behaviour.

Food.. alothough it preferred the wild bird seed mixture, its method of shelling a sunflower seed was very finch-like.

Points influencing female House Finch identification:

1. Black legs eliminated all sparrows.
2. No juveniles at this time of year to confuse this observer.
3. While observing the bird both Peterson's and Robbin's bird books were thoroughly checked, and all other possibilities eliminated. Bird was identical in every detail to pictured bird on p.297 of Robbin's guide, (Peterson's guide shows only part of bird).
4. Observed and verified by Rudi Butot, of CFNS, who reported a male House Finch in June 1973.

P.S. As Peterson's guide states, the bird is grey-brown, not the brown pictured in the Robbins guide.

Example #2

OBSERVATION OF SUSPECTED SHARP-TAILED SANDPIPER

(Erolia acuminata)

On September 12, 1975 while studying the shorebirds at the south end of Beaverhill Lake, Eric Tull, Allan Wiseley and the writer (Terry Thormin) discovered a shorebird that was new to us. At first glance, it most resembled a Pectoral Sandpiper (Erolia melanotos), being about the same size and shape, and with the same general plumage, but differed in two obvious field marks, its breast lacking the heavy and sharply cut of streaking of the Pectoral and instead being washed with a fairly bright cinnamon-buff wash, and its crown being a bright rusty color, instead of the brown of a Pectoral.

The bird was observed for about 3/4 of an hour from as close as 22' using both binoculars (10 power Leitz) and telescope (20 power Bausch and Lomb). It was seen both with Pectoral Sandpipers and Longbilled Dowitchers (Limnodromus scolopaceus) and under excellent light conditions. At this time complete field notes were taken as follows:

Size perhaps slightly larger than Pectoral.
Proportions same as Pectoral.
Bill proportioned same as Pectoral, predominantly gray with basal third of lower mandible greyish yellow.
Bill length about 2/3 of head length.
Head with obvious rusty cap, more so than Pectoral with (heavy) black streaks.
Call "Hrrp Hrrp" (More mellow than Pectoral call).
Gray patch line back from eye.
White line over eye.
Back rustier than pectorals
Deep buffy chest unstreaked except sides of neck.
Lower breast and belly white
Fairly sharp line across breast, not as sharp as in Pectoral
Sides of breast with bit of grayish (Buff?)
Undertail white (with dark streaks particularly on sides)
Legs yellowish green or greenish yellow (darker than Pectorals)
Back (tip) of wing when folded rusty. Same length as tail.
Sides of rump white Sides of tail gray
Darker center to rump and tail
No oval spot (as in Ruff)
Tail like Pectorals in flight
Call not as harsh as Pectoral
Did not particularly associate with Pectorals

At this time a number of photographs were taken of which a duplicate of one of them, marked "Sept. 21 Photo 1" is included.

On October 5, 1975 once again while birding at the south end of Beaverhill Lake, Eric Tull, Mike Morel and the writer discovered two birds of the same description. On this occasion, although the original observers did not take complete field notes, we did note the following:

> Both birds plumper than one seen two weeks earlier, probably indicative of heavy eating and storing of fat for southward migration.
> One bird generally rustier than other, particularly so on cap of head.
> Birds together a considerable amount of the time.

Once again photos were taken, and duplicates of four of them are enclosed, marked Oct. 5, Photo 1,2,3, and 4.

The birds were observed and photographed from as close as 23 feet for about 1½ hours. At this time several other people joined the original observers, including Chip Weseloh who took complete field notes which are enclosed. Other observers included Kay Ball, Miles Hennie, Richard and Michael Palindat and Linda McKeane Weseloh.

If anyone has further questions on the A.O.R.C. please feel free to contact me at the Provincial Museum of Alberta.

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CONSERVATION EDITORIAL: BUCKS FOR WILDLIFE

A NATURALISTS' CONCERN?

by

Helen C.E. Schuler
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Letherbridge, Alberta
T1K 1J0

At the fall meeting of FAN in September, considerable time was devoted to the question of naturalists literally "putting their money where their mouths are" - and indulging in some direct funding to the provincial wildlife habitat fund. The reasoning is that we are wildlife users - albeit in a non-consumptive way, and if we are contributing directly to the wildlife fund, we could have a stronger voice in deciding where the fund should go, i.e. into habitat preservation, establishment of nature preserves, etc. The fund is presently used for such things as shelter belts, improving fish environments, providing wetland areas and other habitat improvement programs. At present the measures are mainly aimed at fostering game species, even at the detriment of other species - for example, destruction of beaver dams to facilitate fish migration. But, biologists connected with the program feel that participation by naturalists will enable them to make the program more flexible, and allow them to undertake projects specific to non-game species.

Much discussion concerned how such a contribution could be implemente We were certain that any naturalist would realize the importance of habitat to our native wildlife, and would also appreciate that if we are willing to pay directly into the fund, the powers that be would realize the seriousness of our concern for wildlife, and this would give more weight to our presentations to the government urging more habitat preservation.

Several suggestions were offered, including a direct donation from FAN, a request for voluntary donations from FAN members, and raising FAN dues, with a designated amount from each membership for the "Bucks for Wildlife" fund. A voluntary contribution program was viewed as likely to cause administrative problems, with the donations potentially getting lost in the shuffle. A direct donation from FAN was considered a good start, resulting in the passing of a motion to make an initial contribution of $100.00. However, FAN lacks sufficient funds to make large contributions annually. Thus consideration was given to raising FAN membership fees by $1.00 per year; that dollar specifically ear-marked for the fund. One disadvantage to thus raising the fees at this time was that we had already increased the dues by $1.00 because of rising printing, postage, and other costs. However, we noted that most other provincial and national conservation naturalist organizations have annual memberships in excess of $5.00, allowing them to provide members with a publication, with additional money for work in preserving some of our wild heritage.

We hope that both individuals and clubs will consider this carefully. Lethbridge Naturalists' Society decided to raise their membership by $1.00, to go to FAN as part of the yearly levy to be included in FAN's annual contribution the the "Bucks for Wildlife" program. This may be our most effective form of input into the cause of preserving some of our natural heritage for future generations to know and enjoy.

Editor's Note: The following letter of appreciation to FAN President, Dorothy Broadbent, indicates the potential effectiveness of this idea, The Edmonton Natural History Club was quick to follow FAN's lead, as indicated by the accompanying Press Release of the Alberta Department of Recreation, Parks, and Wildlife. M.K.M.

October 14, 1976

Mrs. D. Broadbent
President
Federation of Alberta Naturalists
9843 - 63rd Avenue
Edmonton, Alberta, T6E 0G7

Dear Mrs. Broadbent:

It was with great pleasure that Mr. David Neave informed me that you, on behalf of the Federation, have presented the Government of Alberta a cheque for a hundred dollars as a contribution to the "Buck for Wildlife" Fund.

Your contribution is a significant event not only in assisting the habitat development program but in confirming the Division's belief that naturalists and sportsmen have very similar objectives. I look forward to hearing more from your Association, particularly in regard to the development of "non-game" programs. While we feel that many of our habitat projects have a positive effect on many species of wildlife, we recognize that many unique species require special management. Expression of your ideas in this area are important to ensure we develop a well balanced wildlife program.

On behalf of the Government of Alberta, I accept your contribution for "non-game" habitat work in Alberta and look forward to a greater cooperation in work between naturalists and Division staff in the future.

Yours sincerely

signed by

Al "Boomer" Adair
Minister of Recreation,
Parks and Wildlife

21 October 1976

FOR IMMEDIATE RELEASE

NATURAL HISTORY CLUB CHEQUE PRESENTATION

In an effort to encourage increased development and preservation of living places for non-game animal species the Edmonton Natural History Club today (Oct. 21) donated $112.50 to Alberta Recreation, Parks and Wildlife's Buck for Wildlife fund.

Club president Mrs. Margaret Reine, made the presentation to the department's deputy minister T.A. Drinkwater. The money was raised by a 50 cent contribution from each of the club's 225 members.

Mr. Drinkwater said he was delighted with the interest shown by the club in the Buck for Wildlife program, now solely supported by a $1 levy on all hunting and fishing licences sold in the province. The program yielded $150,000 last year.

Although all Buck for Wildlife funds are now applied to projects aimed specifically at improving habitat for game species of fish and wildlife, Mr. Drinkwater pointed out that these projects also benefit many non-game species.

Mrs. Reine stated that by following the lead of the Federation of Alberta Naturalists who recently donated $100 to the Buck for Wildlife fund, her club is hopeful that the money will encourage other naturalists to contribute to the fund, thereby encouraging habitat projects for a greater diversity of animal species.

NATURALISTS' BOOKSHELF (24)

"Wolves and Wilderness" - John Theberge, 1975
J.M. Dent and Sons Ltd. 159 pp.

Reviewed by L.N. Carbyn

It was some time ago that I was approached to review this very attractive book. My own travelling in wilderness areas prevented me from considering the experiences of others. For those, however, who need an escape into the wilds, this is an excellent book.

Dr. John Theberge is a skillful writer and his wife, Mary a most accomplished artist. Together, they have, in my view, produced a materpiece which speaks from the heart of Canadian "north woods".

In his writing Dr. Theberge shows a sensitivity and awareness towards wilderness which is so often lacking among biologists. More than that, he is a teacher who attempts to convey principles of ecology through personal experiences. It is in this latter endeavour that I find fault. Simply stated, I think he moves away from realism and overstates the case. A brief digression to explain why this is so.

During the time of the Viet Nam War and immediately after, the wrath of youth was redirected from a senseless war to civilized man's general disregard for nature and the environment. Environmentalism often flourished in a climate of alarmism. In his book, I believe John Theberge revives some of that alarmism. To the neutral or uncommitted person I doubt if his didactic theme sounds convincing. Naturalists are, for the most part, already aware of mankind's generally callous disregard for the natural world. Such a disregard is often not a willful action by individuals. Collectively, however, we are all responsible. Mankind's ever increasing numbers are at the root of the problem. That, and man's greed, which exceeds his needs, are the messages which this book attempts to convey. The author, in my opinion, overstates the case and thereby loses credibility among all but those who hate civilization and love only wilderness. Parts of downtown Toronto, for example, can be, in my opinion, beautiful and exciting.

In the same way an untouched, virgin wilderness area is the stuff that thrills my senses. Promotion of one to the exclusion of the other is unrealistic. Environmentally sensible decisions will have to come from realistically defensible positions. For example, wolves are symbols of wilderness not because they need the wilderness to survive. All they require is a compassionate mankind. Therefore, to protect the species it is not necessary to set aside large tracts of land as wilderness, although there are many other good reasons for doing so. However, let us not confuse the reason for if we do, we will not get very far in attaining our objectives.

In the book there are only a few technical errors regarding the biology of wolves. For example, there is not sufficient evidence to suggest that wolves do not like getting wet. The fact that wolves choose beaver dams to cross creeks could equally well be associated with their hunting activities, namely, to search out their prey at these sites. I have heard descriptions of wolves crossing rivers, and never breaking stride in doing so. Furthermore, wolves are not known to "chew their own flesh in vain attempts to escape". This is a trait peculiar to other species such as skunks, not wolves. Ritual aggression is not a fool proof mechanism against killing members of its own kind. To say that "killing members of your own species is a human trait", is not correct. Recent studies show that wolves kill each other far more often than previously realized.

The section on "Wolves and Science" is incomplete and outdated. A much more effective section could have dealt with the controversial Alaska, Minnesota and Northwest Territories issues. In all three areas controversies center around man/wolf conflicts and it is here that a scientific perspective is required.

The above remarks do not detract from my admiration and appreciation of the general contents of this book. Passages such as "when man is stripped of his bulldozers, chain saws and explosives, and his equipment is nothing more destructive than a paddle, he is humbled by the silent forest" are vignettes which should strike familiar chords with every outdoorsman and naturalist. Nature Canada selected the chapter on the River Tim in one of its issues.

My favourite chapter, without question is entitled "Wolf Wake". It is a cleverly written blend of legend, biology, speculation and facts surrounding a fascinating species. Truly, I consider this chapter, and the book as a whole having the potential of becoming a great Canadian classic on outdoor writing. I would go so far as to say that teachers should consider using it in Canadian schools. The excellent, mood setting and accurate sketches by Mary Theberge superbly complement the text. One can spend a lot of time just browsing through these sketches. The many moods of our Canadian Wilderness come alive on those pages.

I would like to have seen the book appear in hardcover. For a bibliophile it enhances the appreciation that one accords to the contents of the book. In any case it is a valuable Canadian contribution and will, I am sure, find its way to many bookshelves alongside Leopold's "Sand County Almanac" and Murie's "A Naturalist in Alaska".

NATURALISTS' BOOKSHELF (25)

Nature and Urban Man — Edited by Gerald B McKeating,

Canadian Nature Federation Conference, 21-27 August 1974.
University of Western Ontario, London, Ontario.
Special Publication No. 4, 1975.
Canadian Nature Federation,
46 Elgin Street,
Ottawa, Ontario. K1P 5K6. $4.00

Nature and Urban Man is the first symposium volume of the Canadian Nature Federation. It is the edited Proceedings of the Conference and contains 19 of the 21 papers presented. Following an instroductory presentation by Dr. Martin Edwards, the current president of CNF, the remaining 18 papers are divided into four well balanced sections:

1) The Urban Wildlife Resource - a documentation of the capability of nature to survive in urban areas.
2) Wild Oasis or Concrete Jungle- an outline, for the most part, of some of the inventory, documentation and preservation work being done in urban areas by naturalists' clubs and societies.
3) Planning for Nature and Urban Man - a discussion of the need for education and new approaches to planning and programmes.
4) Planning for Nature and Urban Man in Ontario: A Discussion - an overview of municipal and provincial approaches to planning for nature and urban man in our most populous province.

The first two parts of this four part monograph are an almost unequalled presentation of what naturalists' societies and interested individuals can do to document the natural history of any urban or rural area. Furthermore, and perhaps more importantly for the naturalist (if not the scientist), there are several explicit discussions of how (i.e. field techniques) one goes about a programme of documenting the natural history of a local area. For example, the widely known Toronto Ravine Study is the subject of three of the sections' ten papers. Individual and group efforts are outlined, survey forms are illustrated and examples of reports on specific ravines are given.

Striking closer to home, Mr. Gordon Kerr gives a very good presentation on the Calgary Natural Area Study; survey forms are illustrated and a report writing format is given. Also of interest to Albertans will be Dave Spalding's discussion of "Battleground for Nature in Alberta Cities" - a summary of recent developer vs conservationist battles in Red Deer, Medicine Hat, Lethbridge, Calgary and Edmonton.

Other papers in these sections deal specifically with urban botany, winter birdlife in urban areas and an urban wildlife area. These two sections alone are worth the price of the entire publication.

After digesting the first two sections with a great deal of enthusiasm, I found the final two portions

1) Planning for Nature and Urban Man
2) Planning for Nature and Urban Man in Ontario, to be thoroughly unpalatable!

This may be a result of my much greater interest in the former but I think not entirely. In discussing "Strategies for Wildlife Appreciation in an Urban Environment", Mr. Gerald McKeating asserts that "It is time to stop talking and writing about urban wildlife programs and begin the action to implememnt them." I could not agree more, to the point of feeling that the second half of the symposium is redundant and trite; it's all been said a hundred times before, so let's get off our butts and do something!

In discussing the process of "Incorporating Ecological Concepts into Planning with emphasis on the Urban Municipality", Dr. R.S. Dorney states that:
"Beginning as an observational science, it (ecology) has become since 1945 quite theoretical, quantitative and even given to model building. However as ecologists and ecology within the womb of biology strive to become more quantitative, in my opinion to gain respectability compared with the other science fields, they lost their 'field naturalist' approach."

As a professional ecologist, I must agree, albeit with some embarrassment; we tend to make ecology too complex. However, I think the latter part of the symposium, and its proceedings, suffer from this same contagious disease: the seemingly inherent ability of a system to flow from simple to complex, from autonomic to bureaucratic. Dr. J.G. Nelson, who offered the commentary on the last section and is formerly of the University of Calgary, illustrated the disease well in referring to systems planning, especially of the Village Lake Louise proposal of that era. Dr. Nelson said, "Furthermore, as in so many instances of this kind, the differences among the professionals were not allowed to appear in public. Traditionally, the professional must be quiet and adhere to the established plan once it is agreed to by the leaders in the department".

In summary, the first half of the symposium is a well presented, quite digestible discussion of ACTION steps which individuals and societies have taken to discover urban nature. The second half of the symposium is quite a bore but may nonetheless appeal to the administrators, bureaucrats, complexity seekers and flow chart diagramers who never quite allow things to get off the ground.

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FAN NEWS, REPORTS, PROJECTS

PRESIDENTS PAGE

by

Dorothy Broadbent, President

Your may have noticed that your Alberta Naturalist is growing larger and larger. Unfortunately, it is also becoming more and more expensive to produce. The two dollar membership fee does not cover all the administrative costs of the Federation including the production and mailing of the A.N. The Directors decided at their September meeting to increase the membership fee to three dollars, effective January 1977. You will probably be faced with another fee hike after the next Executive Meeting. In February a motion will be proposed, which will increase the FAN membership to four dollars. The extra dollar to be donated to the "Buck for Wildlife Fund"

This fund is presently sustained by a dollar from each hunting licence sold in this Province. It was started by the Alberta Fish and Game Association presenting the Government with a cheque for one hundred dollars, specifically to be used for maintaining habitat. The Department of Fish and Wildlife administer the fund and use it solely to maintain populations of game species. Now that the naturalists of the Province are also subscribing to the project, we will be able to specifiy the types of wildlife we think are in need of assistance and habitat preservation. I was very pleased to hear the Edmonton Natural History Club has made a donation and the Calgary Field Naturalists are considering subscribing to the fund. I hope all the other clubs and environmental groups in this Province will add their support.

I would like to take this opportunity to welcome the High River Naturalists to the Federation. FAN now has eight corporate members. I hope the Grande Prairie Naturalists, will soon be sufficiently organized to also join the Federation. The Federation of Alberta Naturalists is the only organized naturalist group in this Province. It is important that we encompass all regions of Alberta and unite all the naturalist clubs.

Our Province is experiencing tremendous growth; frightening developments are taking place. The Red Deer and Old Man Rivers are threatened with dams to facilitate industrial expansion. There are only a few environmental groups here to urge caution and point out the dangers of massive uncontrolled industrial growth and resource exploitation. Pressures to develop and use our land, are intensifying. The following letter illustrates my point. It was sent to all the members of the Canadian Ski Patrol, my family received three.

July 30, 1976

Dear Skier:

This letter is to bring to your attention a matter of critical concern to all Canadian skiers. At stake is the right of skiers to enjoy properly developed downhill ski facilities in the Canadian Rockies.

Parks Canada Policy regarding downhill skiing in the Mountain National Parks established in 1972 can be briefly summarized as follows:

> "Major development of downhill skiing facilities in the Mountian National Parks will be limited to the areas known as Sunshine, Mt. Norquay, Lake Louise and Marmot Basin."
>
> Each area will be planned and allowed to develop to a scale that optimizes the recreational skiing potential, in harmony with the natural environment."

On June 1, 1976 in line with existing policy, Parks Canada and Sunshine Village released a summary of long-range proposals for the Sunshine area. The proposals were the culmination of two years study by a group of independent consultants.

Following release of this proposal some well-organized environmental groups have stated opposition to not only the proposals for Sunshine but the basic Parks Policy itself. These groups are fundamentally against any such uses of National Parks, and present an extremely strong lobby to make their opinions known.

Should the opinion of these environmental groups succeed in changing Parks Policy in this matter, skiers will be the losers.

Your immediate help is needed! If you agree that downhill skiing has a place in the Parks, both Banff and Jasper, we strongly urge you and your skiing friends to write to:- The Honorable Judd Buchanan, Minister of Indian and Northern Affairs, Parliament Bldgs., Ottawa. If skiers remain silent, Parks Canada will have no idea that other opinions exist other than those of pressure groups opposing the proposals for Sunshine - PLEASE WRITE OR SIGN THE ENCLOSURE NOW!

Robert Mill - President - Edmonton Zone
Canadian Ski Patrol System

Ed Hemmes - President - Mountain Division
Canadian Ski Patrol System

Geo. Ennis - President - Banff Zone
Canadian Ski Patrol System

John Leu - National President
Canadian Ski Patrol System

It is strange that the opinions of conservationists always appear negative to those resisting development. Environmentalists are viewed as the villains attempting to deprive the affluent of their pleasures and profits. FAN's brief on the proposed Sunshine Ski Development did not oppose skiers' rights to have a wild time on the mountins, but it did point out that naturalists also enjoy wild mountains, and that the two are incompatible.

FAN is still trying to persuade one of our legislatures to purchase the Bird's Eye Ranch. The Directors believe that since it is so close to Waterton National Park it would enhance the size and productivity of the park. The Provincial Government responded negatively to the suggestion. They did not believe they could afford the purchase. We have now approached the Federal Government with our proposal.

Numerous resolutions were passed at the September Executive Meeting, regarding the proposed dam on the Old Man River; the preservation of Stafford Lake; the preservation of the Middle Sand Hills area of Suffield Military Reserve; the proposed Wildland Recreation area at the confluence of the Lost-Milk Rivers; and a resolution requesting the Provincial Government to provide sufficient funding to adequately enforce the existing hunting regulations. A notice of motion was proposed to establish a life membership fee to FAN of $100.00. This will be voted on, at the next FAN meeting, in February.

Anyone wondering when their FAN membership is due for renewal should check the name and address label on their Alberta Naturalist D76 means that your subscription expires in December of 1976. J. means June; S. is September.

My best wishes for the Christmas season and the New Year. The Year ahead will not, unfortunately, be a year of relaxation. We face the prospects of more Hearings on proposed dams in this Province, probably strip mining, and more projected developments for the East Slopes will emerge as the year progresses.

MEMBERSHIP FEE TO INCREASE - Please note, from the President's Page, preceeding that effective January 1, 1977 memberships will be $3.00 per annum for individual members. This is still a much lower figure than most such provincial organizations, or even than several of our member clubs.

IS YOUR MEMBERSHIP DUE? - If your address label reads D76, your membership is now due. Please remit promptly in order to save FAN the expense of reminding you. We would rather spend the money on conservation, the Alberta Naturalist or a FAN project than on sending our reminders!

NEXT MEETING IS ANNUAL MEETING - The next FAN Annual General Meeting will be held at Camp Caroline on the weekend of February 25-16, 1977. A leadership seminar is planned to assist members in learning how to educate and interest the pbulic in nature and environmental issues. Cost is $35.00 per person, $18.00 for children, including dormitory accomodation, a Friday night snack, three meals plus a snack on Saturday and two meals on Sunday. Persons planning to attend should inform the Red Deer River Naturalists, Box 785, Red Deer, Alberta.

NEW CORPORATE MEMBER - On September 19, 1976, at the Twentieth Regular Meeting of the FAN Board of Directors, the following motion by M. McNicholl, seconded by J. Minty, was approved unanimously by Directors present: "that the Board of Directors accept the application from High River Naturalists' Society to become a corporate member of FAN." All present signed, the final acceptance awaiting only the signatures by mail of those absent. Thus, we can now officially welcome The High River Naturalists' Society to our board. Hopefully, the group at Grande Prairie will not be far behind.

NEW NAME FOR OLDEST CORPORATE MEMBER - The Alberta Natural History Society, the oldest extant naturalist organization in the province, recently became the Red Deer River Naturalists, partly to avoid confusion with FAN. See Club Reports for further details.

LIFE MEMBERSHIPS - The following motion by F. Harper, seconded by M. McIvor, was approved at the September board meeting: " that an Extraordinary Resolution be proposed to the next annual meeting for a By-law Amendment setting out a subscribing life membership fee at a minimum of $100.00, or such higher fee as shall be set from time to time by the Board."

THANKS FROM THE EDITOR - The Editor would like to take the opportunity as another year closes of thanking all contributors to the Alberta Naturalist for their support. A special salute goes to DICK DEKKER for his suggestions regarding the lay-out of the printing on the front cover; to LYMAN MATHEWS for shepherding each issue through typists and printers, and to the ANONYMOUS TYPISTS at the Percy Page Center, without whom the Alberta Naturalist could not endure.

NOTICE ON DEADLINES - Please note that articles are no longer taken for specific issues, except when particularly solicited. Committee Chairmen and Corporate Member Clubs are reminded that new deadlines announced in the September Alberta Naturalist will be strictly observed. Untyped material should reach the Editor at least two weeks prior to these deadlines to guarantee inclusion in the appropriate issue. As the Editor's address is currently subject to sudden change, authors should use the FAN box number for the March issue, or check with Chip Weseloh at the Provincial Museum for my latest address.

FAN COMMITTEE REPORTS - Reports of Committees, presented by their Chairmen to the twentieth Regular Meeting of the Board of Directors in Calgary this fall follow. The By-Laws Committee had no report as such, but presented the life membership motion, covered above. No reports were given by either the Environmental Education or Research Committees. However, the May Species Count Day reports by D.V. Weseloh in the September Alberta Naturalist and by Hrapko and Weseloh in this issue are part of the latter committee's jurisdiction.

Publicity Report

A report was sent in early June to Nature Canada on the successful Nature Art Exhibition, "A Brush with Nature" for possible publication. (Published in Oct.-Dec. issue, p.25 - M.K.M.)
A short report on the Art Exhibition was published in the Edmonton Report. 4,000 new brochures were printed and about half distributed. Some new membership applications have been received on the new color brochures. Member Clubs should request brochures if they have potential outlets in mind, such as tourist or information centres.

Arrangements were made with the Book Store at the Provincial Museum to possibly sell the "Alberta Naturalist". This is presently on a trial basis.

Little outside publicity was given to the July field meeting as it was hoped that members would all receive the Alberta Naturalist in time. For this September meeting announcements were sent to all the daily and weekly newspapers in the Province. Local advertising was left to the Calgary Field Naturalists, as indicated at the May meeting.

Information on FAN was updated for the Aide Services of Edmonton for inclusion in their publication.

Your publicity chairman was interviewed for a social science study carried out of selected voluntary and community groups in Edmonton, Toronto, Ottawa, Montreal and Halifax. The objectives of this study were 1) to determine the needs and priorities for social science researchers and voluntary organizations; 2) to assess the adequacy of contact between professional social science researchers and voluntary organizations; 3) to list the areas in which community organizations are currently involved and in which they require social science knowledge; 4) to recommend ways of improving contact between these two groups and the social usefulness of social science research.

John M. Powell
Sept. 16, 1976.

Committee Report, Wilderness, Parks & Natural Areas

September 7, 1976.

As a result of discussions at our meeting in May, several letters have gone out. We wrote Al Adair (Recreation, Parks and Wildlife) about the Milk-Lost Rivers area, expressing our interest and concern; offering support for a significant degree of protection; and asking to be kept up to date on events affecting the region.

Parks Canada was written to express our pleasure at seeing the bio-physical inventory under way and requesting information as to the availability of these studies to the public.

Al Adair was also written to support the proposals by the Edmonton Chapter of the National and Provincial Parks Association and the Alberta Wilderness Association, for a rational system of land use in the Western Swan Hills. Those proposals included areas designated as wildland creation, provincial park and ecological reserve.

Current Issues

- Waterton Lakes National Park) FAN's position will be
  Elk Island National Park) submitted shorly.
- Sunshine Village (Banff National Park) - deadline for submissions was extended to September 30 and by that time we will have prepared a brief on this issue.
- Recreation Policy - National Parks - we have submitted a fairly general statement of principles to Parks Canada, indicating our concern that National Parks must be more than playgrounds. They must permit recreation in the broadest sense, enabling the Parks system to foster the growth of perception.

One other thought is that as public pressure increases for more and better planning, the various Regional Planning Commissions will become more and more important. We should all be aware of these agencies, of their mandate, their role and their actual work, and we should be contributing our opinions in a constructive manner, to the Regional Planning Commissions so that our views are heard.

Mike McIvor

Report of Publications Committee

August 26, 1976

by

Martin K. McNicholl, Chairman

In June, I unexpectedly commenced employment on a survey of vertebrate fauna in Kananaskis Provincial Park, Alberta, with Peregrine Research & Documantation, Ltd. This was a 30 day appointment, followed instantly by a move to Calgary to commence work with Lombard North Group Ltd. Needless to say, all this plus my thesis work somewhat slowed down my work for this committee. However, the September Alberta Naturalist went to Lyman Matthews on August 28, about the time I would normally have taken it to him. I have also produced a proposal for a policy on publications in Alberta, which was sent to the committee members in June. Barbara Danielson and I hope to have this in final form by the September meeting, at which I shall also present the results of the Publications questionnaire. (to be published in the March 1977 issue).

The most important news is our letter from the provincial government, officially recognizing FAN as the natural history orgaization for the province. Thus, we are eligible for a grant for the Alberta Naturalist.

Lyman Matthews reports that printing is now taking longer, so deadlines have been revised for material in the Alberta Naturalist. I have abolished deadlines for articles, as these need not go in the next issue, and often need less work than short reports. I shall no longer solicit material for Club news or from committees, as I feel that my time is better spent soliciting articles, comments, book reviews, etc. I feel that each club should assume responsibility to keep FAN informed of their activities, and not need to be asked individually each time. Of course, new clubs will receive a specific invitation for a submission. Incidently, I have about 30 outstanding requests for articles, book reviews, etc., and Chip Weseloh has also been active in this regard.

The results of the questionnaire show that people are generally happy with A.N. Some would like a glossy magazine as well. We still have several problems of quality to sort out, expecially in regard to proof reading. I believe we should stick with the present format for 1977, while we attempt to iron out the bugs, but also look into the possibility of a Manitoba Nature or Nature Canada format for major articles, with a yellow pages type arrangement for other material (like Nature Canada) in the future. A separate volume or supplememnt should be considered for Research Projects.

FAN POLICY on Publications in Alberta Naturalist Journals, approved at the September 1976 meeting of the Board of Directors.

1. Editors of local journals should publish articles, reviews etc. pertinent to the area which they define as covered by them. Articles on areas outside their own should be returned to the author with the advice that he or she send it to the Alberta Naturalist or whatever local journal covers the area. Similarly, the Editor of a local journal might feel that a particular article from the appropriate area deserves a wider audience than just the local naturalists, and discuss this impression with the author. This policy would not apply to reports of field trips by the local club to another area, or preclude the author's stated desire to publish in a specific journal.

2. The Editor of the Alberta Naturalist should consult with authors and Editors of local journals as to the more appropriate place to publish articles received by him that pertain to a local area with an established journal. Obviously many articles on nature in local areas are suitable for both the local area in question and the A Alberta Naturalist. The question here is whether the article is primarily of local interest or of more interest to naturalists throughout the province. If the author of the article has no preference, the Editor of the Alberta Naturalist should have publishing priority.

3. Articles should not be published in two journals, unless an article is published in one as reprinted from another and clearly identified as such.

4. In some cases we may receive material that is of sufficient importance that it should be published in a more technical or regional journal, such as the Blue Jay or Canadian Field-Naturalist. Here again, Editors should endeavor to encourage authors to submit material to the most relevant journal.

Standing Committee on

Endangered Species

The motions passed at the Canadian Conference for Nature at Ottawa in May, 1976, are encouraging. We look forward to seeing the publication of the conference proceedings and hopefully, implementation of at least some of the recommendations contained therein.

In travelling throughout Alberta and Saskatchewan this summer, it became very apparent to me that the Canadian Plains are indeed in a vanishing act and that unless action is taken very quickly it is going to be the final act. While many vast tracts of native grasslands in the West have been turned over to the complete monocultures of intensive agriculture for many years, it is only in the past decade or so that the remaining pasture lands, steep slopes and wetlands are disappearing at an escalating rate.

The trend to larger mechanized grain farming and away from the smaller mixed family farms is eliminating the samll areas of native pasture for each half section or so that one used to see. As these smaller farmsteads are abandoned, we see the final act coming to a rather sickening close. The advent of the large four wheel drive tractors is also spelling "finis" to those native areas once thought safe from cultivation because of steep slopes, rocks, drainage conditions (wetlands) and other marginal productivity capabilities. When utilizing this type of large equipment, it is economically feasible to exploit all of these habitats for grain farming. The decline of the beef market and rise in the grain market may have been an unfortunate coincidence contributing to the situation.

While the above mentioned problem is not a new one, it is one that is accelerating and should add impetous to our striving for grassland preservation in Alberta and Saskatchewan.

Cultivation coupled with strip mining and urbanization pressures on adjacent natural habitats must be compensated for by the creation of many new ecological reserves and Provincial Parks to insure the survival of indigenous wildlife species.

Past experience with the City of Calgary has left a rather pessimistic view of things to come, at least in this city. With little or no prior notice, city council reduced the proposed Nose Hill Park by 1500 acres and little more than a whimper was heard in protest. It would appear that the "bald-headed-prairie" does not rank very high in the hierarchy of natural history values for the general public. Wooded ravines and slopes appear to have much more support for preservation, at least in Calgary at this time.

I plan to meet with the Alberta Minister of Parks, Recreation and Wildlife on September 29, 1976 and welcome input from this meeting for discussion with him at that time.

Submitted By

Jim Minty

SELECTED BIBLIOGRAPHY ON ENDANGERED SPECIES

Bringing Back The Peregrine Falcon, Richard Fyfe
Nature Canada, June 1976.

Whooping Cranes: The Long Way Back, Ernie Kuyt
Nature Canada, June 1976.

The Canadian Plains: The Vanishing Act, Claude Mondor
Nature Canada, June 1976.

Old Natural Habitats: A Vanishing Heritage, R. Yorke Edwards
Nature Canada, July / September 1976.

June 1975, C.N.F. Conference Publication

Mountains and Seas: Selected Papers from a Conference

Editor: Harold Hosford

Published By: The British Columbia Provincial Museum
Victoria, B.C. and the Canadian Nature
Federation, Ottawa, Canada.

Treasurer's Report as of August 26, 1976

Opening Balance, January 1, 1976		$1,858.71
INCOME		
Memberships--		
Regular	$ 838.30	
Supporting	396.00	
Donations	25.00	
Prepaid	6.00	
Total memberships	1,265.30	
Back issues AN	48.00	
Snowy Owl prints-large & small	161.50	
Loon prints	50.00	
Christmas cards	78.00	
Corporate dues	136.50	
May long week-end (H,Campbell)	29.00	
Government grant	1,500.00	
Total income to date		3,268.30
Total opening balance and income to date		5,127.01
Expenditures		
Telephone	125.36	
Printing	808.68	
Postage	242.25	
Stationary	181.61	
Memberships	10.00	
Miscellaneous	4.50	
Donation	25.00	
C.N.F. Conference	200.00	
Insurance	171.90	
Honouraria	950.00	
Ada Cowen Sculpture (stolen)	30.00	
May long week-end	25.00	
Total expenditures to date		2,774.30
Balance August 26, 1976		$ 2,352.71

Jack Park

Report of ECA Representative

A Conference on the Urban Environment will be held October 13-15 in Edmonton, with public hearings to follow before the end of the year. The background material for the Forest Utilization hearings is nearly complete and these are presently scheduled for March/ April 1977. There may be a further hearing on the Red Deer River Dam proposals in the Spring.

Technical Reports have recently been released on Odour problems at Hinton, on Hydrosulphides, and an Erosion paper by Dr. Jean Legette. The report and recommendations on Erosion in Northern Alberta will hopefully be tabled in the Legislature next session.

The ECA welcome feedback to all their reports and recommendations, positive and otherwise, and are planning further reports summarizing these comments. Get yours in soon on the Biocides Report, which might be the first covered in this way.

The Public Advisory Committee on the Environment (PAC) will be holding their Annual Meeting November 3-5, with Maurice Strong as keynote speaker Wednesday evening. Other days feature a debate on "Growth"; a session on "Environmental Law", various reports and resolutions. The sessions are open to the public at large.

PAC has been concerned with a number of issues this year, notably the Dodds-Roundhill situation and the needs for an overall assessment of energy requirements and conservation. The Environmental Protection Study Group (EPSG) of which your representative is Chairman this year have covered concerns on Suffield, and Elk Island Wildlife Range, the report "Women and the Environment", "Stafford and Eight Mile Lake". "Fort Smith Pelican Colony", grazing especially illegal grazing; illegal access and use of Wilderness and Natural areas, and the Swan Hills proposal among others. Guest speakers have discussed the "Land Use Forum Report", "Roadways and Road Referral System" and "Grazing" with us. We also have scheduled a speaker on the "potential hazards of power transmission lines". The Group has also submitted a number of resolutions for the Annual Meeting.

As Chairman of EPSG I also attended the monthly meetings of the PAC Coordinating Committee and met with the Minister of the Environment in late June. This Committee has been concerned with the Minister's response to the 1974 and 1975 Resolutions, the role of PAC and the Dodd-Roundhill affair having meet with both sides and had a working ad-hoc committee on the topic. Recently I attended a portion of a Non-Renewable Resources Study Group meeting when Paul Skydt discussed an "Alberta Parks Classification and Zoning System" a topic this Study Group has been following for several months. The other Study Groups--Energy Conservation, Pollution, Renewable Resources and Urban Environment--have also been very busy. I can supply information on their activities as well as other information on the topics already mentioned for interested members.

John M. Powell
September 16, 1976.

CLUB NEWS

Alberta Natural History Society - see Red Deer River Naturalists

Bow Valley Naturalists - no report received.

Buffalo Lake Naturalists - No report received. The third issue of the Buffalo Lake Naturalists Newsletter reports field trips to Big Knife Provincial Park (FAN meeting) on July 17-18; the Narrows of Buffalo Lake on August 22; a conoe trip Sept. 4-5; and a visit to the Gadsby area on Sept. 26. A trip to the Provincial Museum in Edmonton was planned for November, and a Christmas Bird Count for Dec. 26. Indoor meetings planned were a slide show by Jim Burrel on Oct. 21, and a talk on Elk Island National Park on Nov.18 An informal meeting in which members related their summer experiences, was held on Sept. 16. This newsletter was received just prior to our going to press, so articles therein are not included in the publications compilation.

Calgary Field Naturalists Society - President Mary Lore submitted the following report.

The Calgary Field Naturalists Society is sponsoring four Audubon films. The first two were excellent, the remaining two scheduled for November 12 and March 25. Details may be obtained from C.F.N.S. at Box 981, Calgary, Alberta.

Jim Butler's program in October on the Southern Appalachians was very interesting and very well received.

The Nov. 17 meeting will feature photographer and naturalist, Tom Webb, of Edmonton on "Butterflies and Moths," The December 15 meeting will feature members' programs, which will be "Birds of Africa" by Andrew Slater, "A summer at Mt. Revelstoke Park", by Jenny Feich, and "Birds we see in Calgary in the winter" by Kay Morck. Jennifer Allen's Science Fail Project will be on display.

The Calgary Junior Naturalists number 50, meet every third Saturday, 9:00 a.m. to 12:00 noon, go on field trips, and plan to meet indoors in December and January, September 18 was a trip to Inglewood Bird Sanctuary. October 16 was a chilly, but interesting day at the Carseland Dam.

November 20 will be a tropical botany study at Calgary's zoological gardens. On December 18 the members and their parents will meet at the Calgary Public Library, 6th floor, to see National Film Board movies, "Grouse Country" and "Castlegard Caves." Sponsors are Cathy and Lillian Johnston.

C.F.N.S. Christmas Bird Count is Sunday, December 19, organized by Ian Halliday (phone: 282-1420). High River Naturalists Bird Count day is Saturday, December 18 organized by Greg Wagner (phone 652-7134).

Edmonton Clubs - No report from either club. The fall program of the Edmonton Natural History Club was printed in the September Alberta Naturalist. The Edmonton Bird Club held a Members' Night on September 17, with slides given by G. Greenlee, M. White, J. Claessen, A. Wisely, D. Dekker, D. Robinson, E. Hopkins, and Mrs. Horne, according to their October newsletter. The October 15 meeting featured Bill Glasgow on "Breeding biology of Canada Geese in the Hanna district." According to the Edmonton Naturalist for August/September, Geoff Holroyd was to speak at the November meeting of EBC. Unfortunately, Geoff had to cancel, so the meeting will feature Martin McNicholl, speaking on grouse, nighthawks, and other birds on Vancouver Island. Bill Koski is scheduled to speak on "Birds of the Arctic" at the December meeting. The new bird club executive are: Past President and Audubon Representative: Graeme Greenlee; President: Barbara Robinson; Vice-President; Lois Fenna; Secretary: Eric Wallace; Treasurer: John Young; Field Secretary: Bob Turner; Librarian: Miles Hennie; Directors: Jim Burler, John Claessen, Tom Webb, Chip Weseloh, and Alan Wisely. The two clubs and the Edmonton Nature Center are jointly sponsoring the Audubon films this year, and both clubs joined with the Edmonton Cahpter of the National and Provincial Parks Association in sponsoring a public meeting on the pelican colonies in the Slave River on October 26. ENHC decided to donate to the "Bucks for Wildlife" program, as shown in the press release printed after Mrs. Schuler's editorial earlier in this issue of the Alberta Naturalist.

High River Naturalists Society- No report received. See Calgary Field Naturalists Society report above for Christmas Bird Count information. A special welcome to our newest corporate member! (see FAN NEWS).

Lethbridge Naturalists Society - Helen Schuler submitted the following report.

The summer is over, and we are into winter activites. Monthly meetings are being held, with programs on such topics as upland birds and mountain hikes. A field trip was taken by the club to Stafford Lake to view the area and familiarize ourselves with the proposals for this area. Letters were sent to the Ministers of the Environment, Parks and Recreation, and Wildlife recommending the retention of the area as marshland habitat. A brief has also been presented to the provincial parks planning branch regarding the future of Cypress Hills Provincial Park. Hearings will be held in Lethbridge some time in November, where people can respond to the parks department's proposed master plan.

L.N.S. and the Fish and Game Association co-sponsored a public meeting on the proposed dam on the Oldman River. Invitations were issued to the ranchers being displaced by the dam, naturalist Andy Russell, The Lethbridge Northern Irrigation District (who represent benefitting irrigation interests), and the Minister of Agriculture to send a representative to present the Views of each party. Both the government and the LNID refused to make a presentation, although they did have observers in the audience. Many interesting points surfaced at the meeting.

L.N.S. is presently also embroiled in a controversy over a proposal of a housing corporation to put a large housing development in an area presently protected by by-law as open park. There is also a proposed scheme to mine gravel in that part of the river passing through the nature reserve. Always there is something!

We are looking forward to our trip to Apgar in November to see eagles. The naturalists there are waiting until the Grizzlies sack out for the winter, to avoid confrontations. Our last formal meeting of 1976 will be a members' night - show & tell, so to speak - where each does his own thing!

Northern Alberta Nature Club.- Y. MacAlister has sent the following report via Chip Weseloh. See also Edmonton Naturalist 4 (8): 186 for a parial history of the formation of the club, and Chip's role in this. We hope this club will soon be a Corporate Member of FAN.

After three meetings and three field trips, we've had a change of chairman, and added a secretary, and myself as publicity. We find we have much to learn. The leaves on the trees make bird identification difficult. Other committments prevent some people from coming on field days. Weather has been against us on field days twice. However, many people are interested in receiving our monthly letter about our field trips and meetings. Two stories in one of our small local papers have brought phone calls from other interested people. The interested are always available and present. We have a place to print our newsletters, and have agreed to obtain a room from one of the county schools for regular monthly meetings. Three personel from our Regional College are available for winter evening programs on such topics as mushrooms and butterflies. Thus, I believe the ground work is nearly finished. I hope we have the first northern naturalist group ready and willing to help the other groups in the province soon.

Red Deer River Naturalist - Maxine O'Riordan sent the following report. At the annual meeting in September, The A;berta Natural History Society voted to change the club name to Red Deer River Naturalists. The former name, borne proudly since 1906, was often confused of late with the Federation of Alberta Naturalists. The water systems of a region give it a unique beauty and character, making our new name seem an apt choice.

Our recently elected President, Fred Schutz, brings to the position a wealth of practical knowledge, and a deep concern for nature.

Outgoing President, Geoff Broadbent, spoke of the busy and successful year. Membership has risen to 89 persons. We had significant input into the E.C.A. Hearings on the Red Deer River dam. Our society paid tribute to Kerry Wood, beloved area naturalist and writer. A 2311-attended tea and reception allowed Kerry and his wife to meet old friends, At this time, tapes of Kerry's favourite stories and articles were placed in city schools. Editor's Note: see Dorothy Broadbent's article on Kerry Wood earlier in this issue.)

CONSERVATION NEWS

Editor's Note: See also the article by Ailene Harmon on the Great Divide Trail, the editorial by Helen Schuler with accompanying letter and press release; Dorothy Broadbent's "President's Page". the book reviews, the FAN reports of Mike McIvor, Jim Minty, and John Powell, and the Club reports. - M.K.M.

Grasslands National Park - The good news is that on August 18, 1976, the Grasslands Hearings Board publicly recommended establishment of the proposed Grasslands National Park in Saskatchewan, according to a report in Parks for Tomorrow 4 (4):1. Adolph Matsalla, Saskatchewan Minister of Tourism and Renewable Resources stated that he expects a decision on whether or not to proceed to be made within three months, which means that in theory by the time you read this, you will know how good the news actually is. The National and Provincial Parks Association of Canada voiced some concern in the above report about the Board's suggestions to allow grazing and limited ranching within the park.

Sunshine, Banff - A report in Parks for Tomorrow 4(4):3 notes that NPPAC and other groups were successful in having the cut-off date for submissions about the proposed Sunshine development in Banff postponed from July 5 to September 30. However, public hearings are not planned, and public information meetings are said to have been poorly publicized. In general, the picture on this issue appears bleak. See also Mike McIvor's report above, the comments on public hearings for National Park issues below, and the Calgary Mountain Club statement, below.

Willmore-Parks for Tomorrow - 4(4):4 reports the good news that an Order-in-Council has banned motorized vehicles, including snowmobiles in the Willmore Wilderness, with fines of $50.00 to $1,000.00 and up to 60 days jail terms in store for offenders. Pharis et al. in Nature Canada 5(4): 35-42, 1976, however voice concern that roads may be built through the area.

School of the Environment, Banff - The Devonian Foundation has presented the Banff Centre a $250,000.00 grant to establish a School of the Environment, according to a report in Parks for Tomorrow 4(4) 4-5. Classes will start in early 1977, with content to be determined by a meeting in October.

Peregrine Falcons- The Peregrine Fund Newsletter No. 4 (September 1976) contains a wealth of exciting news. Attempts in Canada and the U.S. to raise Peregrines in captivity for eventual release into the wild have finally reached a stage where optimism is no longer based primarily on unproved assumptions. Both the Cornell birds and Fyfe's birds at Wainwright have produced viable F2 offspring from birds of eggs originally laid in captivity. Thus, we now know that a sustained breeding population of entirely captive-reared birds is possible. Releases of young birds into the wild in 1975 have shaken some assumptions for the better. As the birds were from eggs of the highly migratory northern Peregrines, it was assumed they would migrate to South America, but in fact at least some wintered in the general area of release, a behaviour like that of the populations which formerly bred in eastern North America. Thus, the survival chances of these birds is less dependent on migration hazards than assumed. Furthermore, some returned to the general and even specific area of release in 1976, sooner than expected. 5(2): 10-17, June 1976. One of the last year's birds was seen flying with and feeding with young fledged this year. A recent article concerning the Alberta program appeared in Nature Canada and an entire issue of the Canadian Field-Naturalist this year is devoted to raptor research and problems. (see Recent literature section). As we go to press, another Alberta article has appeared in the Edmonton Naturalist for November.

Great Canadian Oil Sands Dike Seepage - An Alberta News Release, dated 18 June, 1976, printed in the Edmonton Naturalist 4: 160 reports that Alberta Environment Minister, Dave Russell, has ordered a scientific inquiry into leakage of water from the G.C.S.O. tailings ponds into the Athabasca River. A report was to be ready in July, but has not yet come to our attention.

More on GCOS - the following article from Ottawa Report vol. 1(6): 85-87, 1976, a publication of the Canadian Wildlife Federation, was submitted by Chip Weseloh.

GCOS OF ALBERTA DUMPING POLLUTED WATER

Canada's former Environment Minster Jean Marchand shocked the House of Commons in June when he acknowledged that his Department had known since last year that the Great Canadian Oil Sands Company (GCOS) of Alberta has been dumping 400,000 gallons of untreated wastewater per day into the Athabasca River.

"Relatively, of course, we can not say it is a disaster,"said Mr. Marchand, "but it has to be corrected."

The wastewater dumping was first revealed in a Toronto Globe and Mail article published the morning of Mr. Marchand's announcement. According to the article, polluted water was seeping from the GCOS tailings pond which, by law, is supposed to be a self-contained reservoir. The escaping wastewater, the article said, would fill about 20 average backyard swimming pools; its colour was described as varying from clear to rust-coloured to pea-green.

"Although fish can't live in it," said the Globe and Mail, "no one knows how toxic it is when it's diluted into the full volume of the Athabasca."

The article went on to say that "the Alberta Government has known about the dumping all along and, under the provincial Clean Waters Act, has the power to issue a stop order, an emission control order or a water quality control order. So far, the Government has done none of these.".

The Federal Government is--or, rather, should be--very much involved in the issue as well. In 1974, Environment Canada, in co-operation with the Alberta Government and GCOS, undertook to study the chemical characteristics and toxic properties of wastewater from the GCOS plant. A year later, in September 1975, a study report entitled CHARACTERIZATION OF WASTEWATERS FROM THE GREAT CANADIAN OIL SANDS BITUMEN EXTRACTION AND UPGRADING PLANT was released to Environment Canada. The report concluded that samples taken from the tailings pond "indicated acute toxicity to rainbow trout, and contained a significant quantity of organic carbon".

The presence of organic carbon is potentially serious. Bacteria feed on organic substances like carbon, a process that consume oxygen. If concentrations of the organic substance are high enough, the ensuing oxygen depletion can be fatal to fish and plant life.

The 1975 report recommended that additional work be done to "characterize and identify the organic components in wastewaters" and that tailings pond filter drainage be monitored for toxicity.

Mr. Marchand agreed to table the document in the House, and acknowledged that the Federal Government had the power under the Federal Fisheries Act to correct the dumping situation.

"We could do it," he said, "but we have chosen to try to collaborate with the province of Alberta in order to try to have the standards respected, and that is in the process of being done."

The following week, Cyril Symes (NDP, Sault Ste. Marie_ pressed Mr. Marchand to act on the authority given him under Federal law.

"In view of the fact the the Alberta Government has been ignoring for some time the arguments from its own officials, as well as federal officials, that the environmental controls over development of the tar sands are inadequate, "Mr. Symes said, "and in light of the authority which the Minister admitted he has to enforce water quality standards, can the Minister assure this House that, since a report from his department has concluded there is a danger to water quality in the area from the developments in the tar sands, he will use his authority to enforce reasonable water quality standards?"

Mr. Marchand refused to be pushed.

"The only thing I can do," he said," and this is what I have done, is get in touch with the Government of Alberta, talk and discuss the matter with Mr. (David) Russell (Alberta Environment Minister). I think he has agreed that the level of polllution should come down, and he is taking steps to have the company agree on that."

George M. Cornwall, Director of the Abatement and Compliance Branch of Environment Canada's Water Pollution Control Division, defended Mr. Marchand's position to Ottawa Report. Mr. Cornwall said that the Federal Fisheries Act--specifically, a subsection stipulating that "no person shall deposit or permit the deposit of a deleterious substance of any type in water frequented by fish or in any place under any conditions where such deleterious substances or any other deleterious substance that results from the deposit of such deleterious substances may enter such water..." -theoretically gives the Federal Government the authority to involve itself in the Athabasca dumping issue.

"However, I whish to clarify that the Federal Government has the authority, not the responsibility in the provinces," Mr. Cornwall said. "The provinces have been given the power to act as Federal Government agents in these matters and to retrieve the authority from the provinces would be a drastic political thing to do. The best approach is to work closely with the Alberta Department of the Environment on this issue to ensure that they are aware of Federal concern," he siad.

Mr. Cornwall told Ottawa Report that Federal-Alberta discussions on Athabasca dumping have been "ongoing" and the Alberta Department of the Environment has now issued orders to GCOS to capture and pump the wastewater back into the tailings pond.

"I understand that by the summer of 1977, the plans and construction will be in place to begin the pumping operation," he said. "Speaking as an engineer, I believe that this one-year time limit is reasonable."

In any event, wastewater dumping will continue for at least another year. Contaminants that are almost impossible to retrieve will continue to flow into the Athabasca. It's true that the area directly involved is relatively small, but the real issue is the more general one of environmental protection. Again, it appears that the environment is being sacrificed to political protocol.

Wild Horses captured at Dary Island Buffalo Jimp Provincial Park -

A report by Tyrrell Mendis in Nature Canada 5(4): 22 mentions the capture and slaughter of a herd of horses which had become wild in this Red Deer River area park. Some people had come to regard the "wild" horses as a special feature of the park.

Elk Island and Public Hearings on National Parks - In the September issue of the Alberta Naturalist, we noted that no public hearings appeared to be planned concerning Elk Island National Parks, inadvertently implying that Parks Canada did not intend to use input from the public. R.H. Roberts of the Western Region of Parks Canada telephoned the Editor to point this out, and commented that Parks Canada considers Public Hearings per se as passé. Instead, the following process of public participation, outlined in the "Elk Island National Park Information" book produced by Parks Canada is in effect: 1) meetings hosted by Parks Canada and information booklets will present to the public the information compiled by Parks Canada about the park in question; 1) issues considered to be of importance will be identified by Parks Canada staff, with response requested from the public; 3) public response will be collected through prepared responder sheets, letters, briefs, or any form preferred by the responder; 4) these views and other data will be compiled for analysis, resulting in 5) a synthesis in the form of a proposed Master Plan for the park; 6) this proposed plan will then be revealed to the public at additional meetings, with details on how the plan was adopted, and solicitation of further public response. From this response, a final plan will be drawn up, and ministerial approval sought. After this approval is granted, the final Master Plan will be presented to the public, and implemented. In regard to Elk Island, Mr. Roberts informs me (letter, dated October 11, 1976) that the deadline for public submissions in the early stages of the program is November 15, 1976, and that the open house reviews of the proposed plan are tentatively scheduled for January 1977. I would like to take this opportunity to thank Mr. Roberts for clarifying this issue, and might comment that the process outlined does appear to present a greater opportunity for public involvement than simple hearings. I sincerely hope that naturalists use this opportunity for involvement and that Parks Canada staff seriously consider our submissions.

NEB Hearings on Pipelines - An October news page, titled "Pipeline Update", published by the Canadian Wildlife Federation indicates that the National Energy Board of Canada expects to conclude its hearings on the Mackenzie Pipeline next spring, with the NEB decision in the hands of the Canadian Government for review and consideration by about May of 1977.

More Opposition to Sunshine - The following statement was circulated among FAN Directors at the September Meeting, and will be of interest to all FAN members.

STATEMENT ON THE PROPOSED EXPANSION OF SUNSHINE VILLAGE SKI AREA

The Calgary Mountain Club is strongly opposed to the expansion of Sunshine Village ski area. Although our group engages in both ski touring and downhill skiing, we are united in our opposition to the development scheme.

Mechanized forms of recreation are incompatible with the wilderness character of the region surrounding Sunshine Village. The installation of ski lifts and the introduction of motor vehicles in the region was, we think, a planning error and no further development should be allowed.

Weekend ski traffic on the TransCanada Highway between Banff and Sunshine Village is dangerously heavy; increasing the capacity of the ski area would increase the hazard to our members. Increased traffic on the highway resulting from expansion of commercial ski facilities should not be used as justification for the large outlay in public funds and the environmental damage accompanying highway upgrading.

The management of Sunshine Village has little regard, apparently, for protection of the environment. The watershed below Sunshine Village is heavily polluted with sewage and other contaminants, and has been for years. Recent remedial action ordered by the Parks Branch has been cursory; anyone drinking from Sunshine Creek or Healy Creek takes a serious health risk. Furthermore, there are no notices along these streams to warn of the danger. In view of this situation, we think that the operators of Sunshine Village cannot be entrusted to undertake expansion of the ski area in an

environmentally responsible manner.

The expansion scheme contravenes Parks Canada policy. Officially, further private development within the Rocky Mountain national parks is considered to be detrimental, and is to be discouraged. Yet, the Sunshine Village expansion scheme has reached the advanced planning stage without Parks Canada intervention. Why? Some background information is useful here. A few years ago, the Canadian public drew the line on further growth of commercial operations in Banff National Park when enlarged ski facilities at Lake Louise were firmly rejected. The policy decision to stop further development within the national parks stemmed directly from the public response to the ill-fated Village Lake Louise scheme. Now we are being asked to accept a similar development just down the road, at Sunshine. We favor the official policy of no further commercial development, and we question this apparent reversal. Parks Canada policies should not be altered to meet the needs of a small group of economically motivated persons.

New, high-capacity ski facilities are to be constructed outside the national park system, near Canmore. The ski industry plans construction of a major ski area in the Mt. Assiniboine region west of Canmore. This facility will likely be more convenient to Calgary users than Sunshine; thus, it is reasonable to assume that Parks Canada is under considerable pressure from Sunshine Village and Banff businessmen to allow competitive improvement in services to skiers at Sunshine. Regardless of the negative effects on Banff's ski trade, we deplore the possibility that such interests could sway a public body charged with the protection of Canada's national parks from commercial exploitation. When Sunshine Village approached Parks Canada with this proposal, the response should have been : NO; GOOD FACILITIES WILL SOON EXIST OUTSIDE THE PARK SYSTEM.

As the Calgary Mountain Club, for whom do we speak? We represent many people of all ages who embrace what has been termed 'the new wilderness ethic': <u>that the mountains are best enjoyed under one's own power, with minimum motorized assistance</u>. After decades of enjoyment by the few, backpacking, mountaineering, and especially ski touring are gaining enormously in popularity. This trend amounts to a mass rejection of mechanized forms of mountain recreation, such as dounhill skiing, and we are happy that the public has at last begun

to recognize the value of the wilderness experience. Unfortunately, expansion of Sunshine Village would seriously degrade the wilderness experience for every visitor to the beautiful Shunshine region, in winter and in summer---a great loss to our members, and to anyone who wishes to see Banff National Park as free as possible from pollution, noise, ugliness, highway accidents, and profit-making.

We urge that the Sunshine Village expansion scheme be abandoned, and that the ski area operators direct their attention to the pollution problem they have already created.

John Lauchlan, President
Calgary Mountain Club September 13, 1976.

NOTES AND NEWS

ALBERTA BANDERS,1975 - Volume 1, No. 2 of North American Bird Banding includes the 1975 annual report of the Western Bird Banding Association whose jurisdiction includes Alberta. J.C. Finlay of Edmonton banded more individual birds than any other single person. Edgar T. Jones, as usual, had the second highest total of species, after Allegra Collister of Colorado. Eddie also lives in Edmonton. Thus, Edmonton banders were prominent among those for the entire western part of North America. Species whose highest banding totals were from Alberta were: Goshawk (R/ Fyfe), Swainson's Hawk (Fyfe), Rough-legged Hawk (Fyfe), Ferruginous Hawk (Fyfe), Marsh Hawk (Fyfe), Gyrfalcon (Fyfe), Prairie Falcon (Fyfe), Peregrine Falcon (Fyfe), Merlin (Fyfe), American Kestrel (Fyfe))Note: Fyfe's totals include birds banded in Yukon and B.C., as well as Alberta, by a team with sub-permits under him); Spotted Sandpiper (Jones), Great Horned Owl (Fyfe), Snowy Owl (Fyfe), Hawk Owl, (R. Gehlert), Saw-whet Owl (Fyfe tied with two others), Yellow-shafted (Northern Flicker (Jones), Eastern Kingbird (Jones, tied with Collister), Eastern Phoebe (Finlay), Yellow-bellied Flycatcher (Jones), Traill's Flycatcher (Jones), Least Flycatcher (Jones), Tree Swallow (Finlay), Rough-winged Swallow (Jones), tied with one other), Purple Martin (Finlay), Blue Jay (Jones Black-capped Chickadee (Jones), House Wren (Finlay), Brown Thrasher (Jones), Swainson's Thrush (Jones), Gray-cheeked Thrush (Jones), Mountain Bluebird (Finlay). Bohemian Waxwing (M.K. Nicholl), Red-eyed Vireo (Jones), Philadelpia Vireo (Jones), Tennessee Warbler (Jones), Yellow-rumped Warbler, Myrtle race (Jones), Blackpoll Warbler (Jones), Mourning Warbler (Jones), Common Yellowthroat (Jones), Northern Oriole, Baltimore race (Jones), Evening Grosbeak (Finlay), Pine Grosbeak (Jones), Dark-eyed Junco (Slate-colored race) (Jones), and Clay-colored Sparrow (Jones).

New Journals or Magazines - A new magazine, with some articles of natural history interest is Alberta's Western Living, a glossy type monthly, distributed free in Calgary and Edmonton, and for a fee elsewhere. The first issue was in September 1976. John M. Powell has drawn our attention to a new journal. Prairie Forum, published twice a year. The first issue was published in April, 1976. This journal encompasses the theme of Man's activities on the prairies, and can

be obtained for $10.00 per year from the Editor, Prairie Forum, Canadian Plains Research Center, University of Regina, Regina, Saskatchewan S4S 0A2. Dr. George F. Ledingham, former Editor of the Blue Jay, is one of the Associate Editors.

Karvonen wins film award - Former Edmonton Bird Club President, Albert Karvonen, of Sherwood Park received the distinction of Best Nature and Wildlife feature in the Alberta Film Festival Awards, 1976 in September of this year. His winning film, "Drummer in the Woods", depects the complete life cycle of the Ruffed Grouse. The film took ten years to complete, and includes some very rarely observed behaviour sequences. Congratulations Albert! My thanks to Lorne and Phyllis Wallace for an article on the event from Sherwood Park News, Sept. 29, 1976, which features a large photograph of Albert.

Nelson publishes new fish book - Dr. Joseph S. Nelson, co-author of "The fishes of Alberta", has recently published "Fishes of the World", 416 pp. The book sells for abut $25.70 from John Wiley & Sons, Canada, Ltd., 22 Worchester Road, Rexdale, Ontario M9W 1L1, or $24.45 at the University of Alberta bookstore. The contents, taken from the publication notice, are as follows:

> The book presents a modern systematic treatment of all major fish groups and is designed for the ichthyology student and others who desire a modern review of, or reference to, fish classification. Alternate schemes of classification are referred to. Descriptive material, including range, is given for all extant fish families (frequently to lower levels). Major extinct groups are also discussed. The number of recognized general (with examples or full listing) and species are given for the vast majority of families. Some 45 distribution maps, a checklist, and bibliography are also included. The book contains about 420 outline drawings.

The Birds of Alberta - The third edition of "The birds of Alberta" by W. Ray Salt and Jim R. Salt became available from Hurtig Publishers, 10560 - 105 Street Edmonton at $10.00 per copy, just at our presstime onNovember 5, 1976. This is a completely revised and updated edition,filled with colour photographs and paintings by many Alberta Naturalists. A review will appear in a forth coming issue of the Alberta Naturalist.Most Alberta bookstores will have the book in stock.

IN THE NEXT ISSUE

As we are now in the happy state of having more material at hand than we could print in this issue of the Alberta Naturalist, the Editor has retained several items for the March 1977 issue. In addition, several other items have been solicited or volunteered. Those for which a committment has been made are listed hereunder.

Items at hand, slated for the March 1977 issue:

CASE, J.W. Recent Pulbications on the Natural History of Alberta (20).
A Second compilation of lesser-known reports.
FISHER, B.M. NATURALISTS" BOOKSHELF (26). Evolution of the Amateur Naturalist.
MCNICHOLL, M.K. The Editor's year: London to Madeira Canyon; Kananaskis to Washington.
RONAGHAN, A. Through different eyes.
SCHUTZ, F. Notes on loons.

Items forthcoming include articles by Dick Dekker on shorebird migration at Beaverhill Lake and on difficulties in identifying falcons; an article on Dippers By David M. Ealey; a review of "The plant fancier's guide to the Edmonton area" by Julie M. Hrapko; the substance of Joe Nelson's address to the May 1976 FAN meeting; and a report on the White-faced Ibises at Lethbridge by Helen Schuler.

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Deadlines for submission of material to the Editor are: February 1, May 1, August 1 and November 1. Please include your address. All maps, charts, etc., should be submitted on white paper, of the appropriate size for publication, preferably done in type and/or india ink.

FAN membership fees are $3.00 per year regular, $10.00 supporting, tax deductible ($7.00 worth). Mail remittance to: Federation of Alberta Naturalists, Box 1472, Edmonton, Alberta T5J 2N5.

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NATURAL HISTORY
INFORMATION NO. 36
Draft DAES & DVW
December 1976

Preliminary List of Birds Seen on Edmonton Christmas Bird Counts*

Canada Goose
Mallard
Pintail
Lesser Scaup
Common Goldeneye
Bufflehead
Common Merganser
Goshawk
Rough-legged Hawk
Golden Eagle
Gyrfalcon
Peregrine Falcon
Merlin
American Kestrel
Ruffed Grouse
Sharp-tailed Grouse
Ring-necked Pheasant
Gray Partridge
Rock Dove
Great Horned Owl
Snowy Owl
Hawk Owl
Barred Owl
Short-eared Owl
Boreal Owl
Common Flicker
Pileated Woodpecker
Yellow-bellied Sapsucker
Hairy Woodpecker
Downy Woodpecker
Black-backed Three-toed Woodpecker
Northern Three-toed Woodpecker
Gray Jay
Blue Jay
Black-billed Magpie
Common Crow
Black-capped Chickadee
Boreal Chickadee
White-breasted Nuthatch
Red-breasted Nuthatch
Brown Creeper
American Robin
Golden-crowned Kinglet
Bohemian Waxwing
Cedar Waxwing
Northern Shrike
Common Starling
House Sparrow
Rusty Blackbird
Evening Grosbeak
Purple Finch
Pine Grosbeak
Hoary Redpoll
Common Redpoll
Pine Siskin
Red Crossbill
White-winged Crossbill
Dark-eyed Junco
Harris' Sparrow
White-throated Sparrow
Snow Bunting

Total Species = 61

Birds Seen in Count Area but not on Count Day

Black Duck
Sharp-shinned Hawk

Alberta CULTURE

* Compiled from data on file at Provincial Museum of Alberta. for years 1907, 1937, 1945, 1946, 1953, 1956-69, 1973, 1974.